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A COSMOPOLITAN BIWEEKLY FOR THE GENERAL PRACTITIONER

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Editorial Department.

Acute Bronchitis.

THERE is perhaps no one disease for which the physician is called upon more frequently to prescribe than acute bronchitis, nor is there a disease of which the layman thinks he knows all, and by reason of his knowledge can prescribe for himself. The almanac so promiscuously scattered about by the enterprising proprietary medicine firms is largely responsible for this belief. Take an average farmer who depends on his knowledge and skill to conduct a farm with profit, or the successful tradesman or mechanic, "up-to-date" in their respective callings, will when confronted with disease in their families, display such ignorance and jeopardize health by reason of their blind following of the teachings of so-called "domestic medicine" promulgated by tradition and the almanac. It is timely that physicians stop to consider occurrence of acute bronchitis and its care, and dispel the belief that it is "a common disease" and urge their patrons to regard it as of serious import, and should be properly treated. Dr. Dillon Brown, of whom there is no better authority, in his excellent journal, *Pediatrics*, editorially comments upon a feature of this subject as follows:

"The raw weather of northern winters makes this topic always important. For dwellers in cities winter bronchitis is by no means a trifle. In infants and young children it is the familiar winter substitute for diarrhea in summer, and among adults, particularly those who live under the trying conditions of the tenements, it outnumbers far away all other winter diseases. Undoubtedly the most important element in etiology is the inhalation of bacterial dust. This is flying everywhere in closely built towns and cities, and until people can be brought to realize the danger of promiscuous spitting, pathogenic bacteria in untold myriads will continue to fly. They are thicker of course in cars, steamboats and ferry houses; and in those dwellings where register heat is provided from basement furnaces with an "intake" near the ground and no straining apparatus they are also apt to be numerous.

"How the bacteria may be avoided is consequently a grievous question, which for the multitudes who must travel on the streets or in the cars admits of no present answer. Till the external conditions improve the only way of escape is in the increase of one's resisting power. This is, of course, the salvation already of the thousands who do not suffer, but for

those who do, some simple prophylactic and therapeutic suggestions may not be out of place.

"First, as to the prophylaxis; the danger of sudden chilling of the surface of the body is familiar. Some people "take cold" with peculiar readiness from sudden exposure of certain parts of the body, as the ankles, in changing on a cold day from high to Oxford shoes; or the neck when a low collar is substituted for a high one. One should remember, too, that the momentary resisting power of the body is greatly reduced by physical fatigue or exhaustion, and that bacteria will start a growth readily in one cases where they might have been successfully opposed in the other. The air one breathes is also of prime importance. Air, in-doors and out, is vitiated for breathing purposes in various ways: the waste from gasworks, the effluvia of sewers, the chlorine, bromine and sulphur dioxide of laboratories, the formaline vapor of medical museums, are fruitful means of lowering the tone of the bronchial mucosa, as the better understood matters of human exhalations and promiscuous dust. That tobacco smoke harms acute cases goes without saying, though with the chronic ones it may be otherwise. Ventilation, therefore, is a question of urgent importance, upon which, however, this would not be the proper time to enlarge. Daily cold bathing, particularly of the neck and chest, is an excellent prophylactic. Delicate and aged persons may substitute for the plunge or the shower simple cold sponging.

"When once the bronchitis is caught the patient should simply go to bed at once (with or without the existence of fever) and stay there till well on the road to recovery. Steam inhalations (medicated, perhaps, with carbolic acid or compound tincture of benzoin) will be of service. Great care should be exercised about the ventilation of the room; a theremometer should be kept (on the level of the bed at 65 degrees or 66 degrees F. Light diet, a purge and ammonium chloride with heroin will be enough in the way of active treatment. Physical exercise should be sparing during convalescence till all danger of relapse has passed. In fair weather, and after defervescence the patient should wrap up warmly and lie in the air on the verandah, if such a structure is available.

"When city cases come to the doctor's hands after five or six weeks of alternate improvement and relapse, the patient should be sent away as promptly as possible to the country, or if circumstances permit, to a southern climate. In the choice of a climate sunshine, atmospheric dryness and reasonable equability of temperature are of more importance than mere warmth. In this connection it would be well to warn the patient to take his heavy underwear and overcoat south with him, for no weather is made to order; no later than last week it was 16 degrees F. at Charleston, S. C., 17 degrees F. at Camden., S. C., and not much above this in northern Florida. These are temperatures which are quite low when one remembers that southern houses are not built to withstand the cold. A well-known professional man in New York, who has immense experience in such matters, remarked recently that his more delicate cases he did not permit to come north again till the 20th of April. Robust young persons will often get well of the most obstinate bronchitis in a week or ten days

under wise climatic treatment, and may come home as soon as they are restored to normal health."

Dr. Brown's experience in city practice is similar to that met with in country practice. Our experience is that bronchitis is a most neglected disease by patients, and frequently by physicians thinking "it will wear itself out." Such a belief is responsible for more than one premature death, more than one case of acute pulmonary tuberculosis fastened upon an ordinary and curable (under proper conditions) acute bronchitis. A bad cold, of which acute bronchitis a usual feature, should have skilled care and thorough examination. F. P. N.

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The Number of Talented People.

"The Lay Preacher" in the *Globe-Democrat* has a fund of wholesome advice and gives it in an entertaining and practical manner. The other day while riding on a train we chanced to read one of his every day sermons "On the Number of Talented People." It is so apt and worthy and especially good for that class of medical men (chiefly new men in the profession) who regard their education as finished, that we have thought well to quote some of the wisdom of this sermon:

"There is only one thing easier than to learn, and that is to stop learning. If this were not unfortunately the case, the whole world could be educated in a few years. It is undoubtedly the case, however.

"Almost every one knows how easy it is to stop learning, but the discovery of how easy it is to learn is only made by a minority of the human race in St. Louis and elsewhere. An acquaintance of mine who did not make it until he was more than 30 years old was greatly surprised. When he was at school his attention was largely occupied with stopping, and he concluded when he left school that he had no "sense" and no "talent" worth troubling himself about. By the merest accident in the world, the accident of becoming so deeply interested in something or other that he did not find it easy to stop, he found that he could go on learning as long and as easily as he pleased, and he is going on accordingly. His immediate purpose is to get an increase of salary. This he is certain to do, if he learns first and then asks for an increase. Otherwise, he will be greatly appreciated, and will have a handsome wreath of flowers sent for his coffin when he dies. That, however, is the topic for another discourse.

"The most important fact in connection with the present discourse is that it is as easy to lose everything that has been learned as it is to get it and increase it by going on. Every one knows the case of the talented Theophilus Bright, or cases like it. Theophilus graduated with the highest honors at college—"maxima cum laude" his Latin diploma said. He has not learned anything since, as far as he or any one else has been able to discover. He "completed his education at Harvard," he tells his friends, and it is the most mournful fact of his whole career that he is telling them the truth. He is one of many victims of a completed education. The odds are heavy that now, fifteen years after his graduation, he could

not construe the Latin of his own diploma if his life depended on it. He still knows how to read, and he can quote a scrap of Latin occasionally to show that he belongs to the educated classes, but that is all he can reach of what he learned before stopping. Perhaps he has it all down in the ooze at the bottom of the channel over which his life-currents are flowing, and perhaps he could fish it up, one thing at a time, as such classes must be recovered. But he has no taste for work of that kind, and his education is "complete."

"This is what happens to most of the brilliant geniuses whose admiring friends expected them to become the greatest men on earth. They stop learning on the theory that they know enough for one lifetime, and the result shows what was meant when it was said that from all the talented people who have not, shall be taken away all they thought themselves to have.

The only people who ever really become "educated" so that they can use what they know for all it is worth—including among other things its use for continuing to learn—are those who get their direction first and then strike the gait they are going to keep. The people who break down soonest are those who exhaust their enthusiasm and consequently "lose their wind" at the start. It is not a question of passing any one else on the way, but of keeping on, and those who are the most anxious at the beginning to get in front of some one else are the most apt to stop.

"If there is ever a general judgment day at which all the people now on earth are to be asked why they did so little when there was so much to do, the unanimous reply from all of us will be that we did all we were fit for, all we had "talent" for. And the whole of us will have to explain why we did not proceed to get all the talent that might have to been had by going after it and not stopping.

"An idiot is a person who at 20 years has learned nothing more than he knew at 3. In idiots of one kind this may be due to a skull that will not allow the brain to expand. In idiots of another, it may be due to "hydrocephalus," or water on the brain, a disease which gives rise to the metaphor of the "swelled head" as a reproach to those who stop learning, because they think they have completed their education and know enough already. But excepting the small number of idiots who are so because of the variety of causes which prevent them from using their brains at all, the population of the world consists of talented people who can get as great an increase in talents as they are willing to start after and keep on going after. Keeping on is talent. And if the start is made early enough and in the right direction, if there is no turning from the right road into every attractive by-way that seems to branch out in the same way general direction, talent will become genius at last. "Geniuses" are men who know what they wish from the start, who learn a little of it at a time, who go on learning and never stop until they have kept the connection to the too and learned the sum total of what is in them. Very few people of this kind appear on earth. But the world is full of talented people who do not know it. Ninety-nine people of every hundred in the world have talent enough to learn all that is known of any subject they choose to learn, by learning a little of it every day and not stopping because the attempt to learn too much of it at a time gives them a headache."

Creosote in the Treatment of Pneumonia.

THE theory of treatment of all infectious diseases is much the same, viz., to encourage the production of serum antitoxins which will overcome the specific toxic influence generated by the pathogenic germs. In diphtheria this has been established by artificial production of an antitoxin which practice has established as reliable and thoroughly scientific in its application. Other infectious diseases are as yet not so fortunate in having at hand the ready means of generating serum antitoxins to aid in the treatment of disease, and in consequence results are not altogether satisfactory. Especially is this true of pneumonia where the mortality has reached the alarming degree of forty per cent. This disease seemingly is becoming more virulent, or else the compilation of statistics more thorough, for we find that about the middle of this century the mortality was as low as 12 per cent, while now it is from 20 per cent in uncomplicated cases to forty per cent with complications. Naturally, in considering treatment it deserves to evolve some means or methods which will increase the resistance abilities of the individual along natural lines, that is, by increasing the generation of serum antitoxin, and thus hold in check the ravages of the disease. Or in other words, treatment must be antitoxic in order to end the pneumonic process and its results—the toxemia—which is in fact, the cause of death in pneumonia.

Recently in the current literature there is evidently a tendency to solve the great problem of therapy of pneumonia along the lines of antiseptic treatment. Creosote—the carbonate—more commonly called creosotal, has been advocated by Weber (Med. Record, November 1, 1901), Thomson (Med. Record, February 1, 1902) and others, with results which seemingly warrant the statement made by Thomson "That the drug may exert a special effect upon the course of the pneumonia." He further says this is rendered probable by the pecuilar course of the temperature after its administration, a fact which he noted in his series of cases. "Thus the disease terminable by lysis in twelvse cases, and by crisis in only five. In a number of them a fall in the temperature of from one to three degrees occurred within twenty-four hours after beginning, but the next day it would rise again, and so continue with a very irregular course for a number of days before it reached normal."

Thomson says, it affects favorably tympanites which is an undesirable complication in pneumonia. It will cause no depressing effect on the circulation, nor is there any fear of its acting injuriously upon the kidneys. Thomson recommends that it be given in pneumonia in fifteen grain doses every two hours, night and day, or 18 grains in the twenty-four hours. His formula for administering it is:

℞ Creosot. carbonat..... ʒiv
Glycerini..... ʒi
Aqua Menthae.....ad Oss
M. Dose: Tablespoonful in water.

Weber comments upon the use of creosote as follows: "the carbonate of creosote exercises a markadly beneficial and uniform influence upon the pneumonia patient.

"Is it really a remedy for pneumonia? In attending a case of pneumonia our present working theory is about this: the illness of the patient is caused by specific toxins formed through the action of certain pathogenic germs, and that his recovery is dependent upon the speedy production of serum antitoxins, which must be sufficient in quantity and quality to overcome the deleterious action of the toxic substances circulating in the blood. In the majority of cases the system is adequate to the demand, but in a considerable number, at least 25 per cent, it is not, and the patient succumbs. When a typical case of pneumonia ends by crisis, what is generally disclosed by the physical examination made the day after? The patient rests quietly, breathes easily, pulse and temperature are normal or subnormal; the affected lung, however, is found to be in the same state of hepatization of the day before, and the work of resolution begins and proceeds with more or less celerity. Very much the same thing occurs after the administration of creosotal, as have seen in all of the cases cited, and in many more reported by other observers; about 1 dr. of the drug having been taken, the temperature goes down to normal, and the patient feels much better generally. If the drug is now discontinued, the temperature, etc., will go down, up again; we resume and continue at the rate of 50 to 60 gr. per day for three, four, five or six days, and then the temperature will go down, and the affected lung will begin to clear up.

"It must be conceded, I believe, that neither to the antipyretic nor bactericidal qualties of creosote is to be accorded this remarkable and beneficial influence upon pneumonia, a fact which, so far as my experience goes, is never accompanied by any symptoms of depression or disturbance of the gastrointestinal tract. It is reasonable to say that its action must be antidotal to the pneumonic toxins. No sooner were the patients under the influence of creosotal than all further anxiety about them appeared to be unnecessary. We visited and examined them twice daily, saw to it that our directions as to nursing and feeding and the exact dosing of creosotal were properly carried out, and had the satisfaction of seeing patients through the illness without resorting to the usual array of hypodermatic remedies.

"It may be urged that, pneumonia being a self-limited disease, even bad cases will recover; so they do, as we all know; but then good and uncomplicated cases die in spite of the best care and the so-called symptomatic treatment because the system does not furnish a sufficiency of serum antitoxins to the end the of pneumonic process. Unfortunately, we are not in a position to tell in any case of pneumonia whether Nature will be able to do the one thing needful and cure the patient? we must go on, therefore, trying to find a remedy on which we can rely in helping Nature's efforts. These cases and many others have shown, I believe, that creosotal is such a remedy working in a very similar way to the antitoxins furnished by the system."

Favorite Prescriptions

For Specific Iritis — The following is recommended to be given internally in cases of syphilitic iritis:

℞ Hydrarg. biniodidi..... gr. vi
Potass. iodidi..... ʒiss
Aq. destil..... ʒss
Syr. aurantii, q. s. ad..... ʒiij
M. Sig.: One teaspoonful three times a day after meals.

Frost Bite.—Protect the hands, feet, and ears, especially in children. When frostbitten, rub parts with camphorized alcohol and apply:

Starch..... 9 parts
Salicylate of bismuth..... 1 part

Apply tincture of iodine pure, or paint on each night:

Glycerine..... 20
Tinct. iod..... 10

—Comby.

To calm itching at night, apply:

Glycerini..... 50
Aquae rosae..... 50
Tannin..... 0.10

—C. Besnier.

When ulceration has occurred, apply morning and night:

Borax..... 5
Vaseline..... 30

—*Journal de Medecine.*

Treatment of Laryngismus Stridulus.—The following is recommended by *Merck's Archives* in treatment of laryngismus stridulus occurring in children two years of age or older:

℞ Tinct. belladonnae..... m. xii
Chloralis hydratis..... gr. xx
Potassii bromidi..... ʒi
Syrupi aurantii..... ʒiv
Aquae destil..... ʒii
M. Sig.: One teaspoonful every hour until difficult inspiration is relieved.

Quinin as a Styptic and Antiseptic.—Occasionally the general practitioner is called upon to check hemorrhages which are stubborn to treatment. Marx, as noted in *Med. News*, states that iodoform and its derivatives have so many objections that he has been induced to search for other substitutes. Among these he has tried quinin with great satisfaction. He employs the following combination:

℞ Quininae hydrochloratis..... gr. x-xx
Alcoholis..... ʒss
Aq. destil. q. s. ad..... ʒii
M. Sig.: Saturate the gauze and apply to bleeding surface.

OUR MONTHLY QUIZ.

Prizes Open to Fortnightly Subscribers.

TOPIC FOR FEBRUARY.

1. **How do you treat the pernicious vomiting of pregnancy (medical and hygienic treatment)?**

TOPIC FOR MARCH.

2. **How do you treat the rheumatic affections, viz.: Rheumatic fever, sub-acute and chronic rheumatism?**

Answers should reach this office not later than the 15th of the month.

Questions for discussion in this department are announced once a month.

For the best and most practical answer to any one of these questions we will give a prize of $5.00. To the second best a subscription to the FORTNIGHTLY for the year. The answers must be short, no one answer to contain more than four hundred words. We shall publish the substance of such of the answers as seem most likely to prove interesting to our readers.

Only subscribers to the FORTNIGHTLY will be recognized as competing (although we shall be pleased to hear from others who have ideas to suggest), and all persons known to be engaged in medical journalism are disqualified. Prizes will not be awarded to the same person more than once each year. Every answer must be accompanied by the writer's full name and address.

The Treatment of the Pernicious Vomiting of Pregnancy.

By Everett J. Brown, M. D.,

DECATUR, ILL.

BY pernicious vomiting of pregnancy I understand, the persistent, uncontrollable vomiting occurring usually in the first half of pregnancy, in which practically nothing is retained by the stomach, and which if allowed to continue, often ends fatally; the patient becomes bedridden, emaciated, the pulse becomes rapid, more or less fever may develop, and a typhoid state ensues.

The remedies suggested for this condition are legion, hence none are of much value. In true pernicious vomiting nothing is retained by the mouth; if medicine or food is retained at all, the vomiting is not pernicious and does not require the extreme treatment which I advise.

The treatment which I have found successful in six out of seven cases which I have seen in the last eleven years has been the hypodermatic injec-

tion of morphine and atropine in doses of one-fourth and one one-hundred and fiftieth of a grain respectively; this dose to be given two, three, or even four times in the twenty-four hours. In no case has the morphine habit been produced, but on the contrary, after three to six weeks treatment, when the uterus has lifted itself out of the pelvis and into the abdomen, the morphine was gradually discontinued without protest from the patient.

Case I.—Single girl aet 18. Had been treated for three weeks for ulcer of stomach; she was much emaciated and lay in a typhoid state with fever, and sordes on gums; nothing, not even a teaspoonful of water was retained; a vaginal examination revealed pregnancy, and a hypodermic of morphine gave her the first rest for several nights; the dose was increased to half a grain daily, and and when under its influence she would retain milk and broths; her condition gradually improved, and at end of five weeks the morphine was discontinued, and she gained rapidly in flesh.

Case II.—Mrs. F. Twice have I conducted this woman through a most pernicious form of vomiting; besides rejecting everything she suffered great pain beneath the sternum; a quarter grain morphine tablet four times in twenty-four hours for a period of six weeks in first, and four weeks in second pregnancy, carried her safely through.

The other three cases were similar and required same treatment; one had had abortion performed twice for this condition.

The seventh case seemed to have an idiosyncrasy against morphine and was not successful; abortion was necessary to save her life.

This treatment I recommend not for the ordinary, or even the moderately severe forms of vomiting, but only for the bed-ridden and greatly weakened patients who otherwise might pass on to a fatal termination, or require an abortion to save life.

Hygienic and Medicinal Treatment of the Pernicious Vomiting of Pregnancy.

By Arthur H. Flickwir, M. D.,

DETROIT, MICH.

THE first thing to be considered in the treatment of the pernicious vomiting of pregnancy, is the regulation of diet, and the patient's mode of life. All sexual intercourse should be prohibited. Strict attention to the condition of her gastro-intestinal tract. A light breakfast should be taken in bed, before the patient arises in the morning. After breakfast she should rest for an hour or so, by doing this the nausea and vomiting caused by the ingestion of light food may be avoided. Tea and toast or milk is sufficient for the morning meal. In the worst cases rectal alimentation is often indicated. Liquid peptonoids, peptonized beef-tea, and pancreatized milk are quite satisfactory, as the enemata should not

contain anything irritating. Three to seven ounces may be given three or four times a day. The rectum should be kept clean, and injections of normal salt solution will relieve the distressing thirst, which is a usual symptom. It must not be forgotten that the vomiting of pregnancy is a neurosis, therefore a strong nervous and moral impression upon the patient will help admirably.

MEDICINAL TREATMENT.

Cocaine is an excellent remedy given in gr. 1-12 doses, or may be used as a spray to the fauces. Small doses of calomel gr. 1-20. Oxalate of cerium, subnitrate of bismuth are all efficient. Iodine gtt. i-ii in water gives good results. Sodium bromide, potassium bromide and chloral are the best nerve sedatives to use. Sod. brom. gr. x and aq. camph. f3 iv four times a day is very good. The bromides may be given by enemata when the stomach will not retain them. Patient should be kept quiet and in bed.

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Consolidation Again.—The union of the Cleveland Journal of Medicine and the Cleveland Medical Gazette, which was recently announced, is one of the most important of consolidations yet recorded in journals of this class. Both journals occupied an enviable position among medical journals, and the new journal, which is to be known as the Cleveland Medical Journal, must needs be one of great strength and usefulness.

A Millon Prisoners.—Russian prison statistics lately published reveal some startling facts. Four years ago the number of prisoners in Russia was 764,373; now it has risen to 842,729. If the inmates of the military prisons, the peasants in the houses of correction and the prisoners in Transcaspian jails were counted, it would be found that a million of the subjects of the Czar are incarcerated, not including the Siberian exiles, who number 77,160.

A Monument to His Memory.—By the will of the late J. Alfred Kay, of Philadelphia, many hospitals are the subjects of substantial bequests. Among these are $5,000 each to the Pennsylvania, Germantown, University, Jefferson, Orthopedic and Polyclinic Hospitals. The codicil also gives $1,000 each to St. Agnes', St. Joseph's, Jewish, Hahnemann, Presbyterian, German, Children's, Howard, Medico-Chirurgical and Gynecean Hospitals and to a number of homes for the blind. etc.

Isolation Pavilion for Consumptives, Blackwell's Island.—On the last day of January, the tuberculosis pavilion at the Metropolitan Hospital on Blackwell's Island was opened for the reception of patients. It contains 120 beds which will be filled as soon as the weather moderates so that the transfer from other hospitals can be made without danger to the patients. Five buildings, recently occupied by insane patients, have been converted to the use of the consumptives. It is expected that an extra appropriation will be obtained from the Charities Department to pay for the refitting of the four other buildings.

Original Department.

PAPERS for the Original Department should be in hand one month in advance, and contributed to THE MEDICAL FORTNIGHTLY exclusively. A liberal number of extra copies will be furnished authors, and reprints may be obtained at reasonable rates, if request accompanies the manuscript. Engravings from photographs furnished free.

Contributions, and books for review, should be sent to the Editors, 312 Century Building, St. Louis.

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Vaccination.

By John Whitlock Hairgrove, M. D.,

JACKSONVILLE, ILL.

Read before the Morgan County Medical Society, January 7, 1902.

VACCINE disease; vaccinia; cow-pox is an infectious disease characterized by general and local symptoms. When this disease is successfully conveyed to the human body it produces an immunity from smallpox. Its introduction into the blood of man is by direct infection and is called vaccination.

Vaccination when successful produces a vesicle to the point of introduction, and the contents of this vesicle when re-inoculated into a healthy person not previously vaccinated, or having had the smallpox will again produce the same disease.

Tyson says it is pre-eminently characteristic of vaccaine disease that it can be communicated only when directly introduced into the blood. Quoting further from the same author:

"Nature of Vaccinia.—Two views as to the true nature of vaccinia are held—the English, that it is smallpox modified by transmission through the cow; the second, or French view, that it is a separate disease distinct from smallpox. Each side claims that its own view is sustained by experiment. The former view is probably correct—that vaccinia is smallpox modified by passing through the cow."

Lymph in Use.—At the present time it is almost the universal practice to use animal lymph or the lymph directly from the cow, although humanized lymph, that from another person having vaccine disease, can also be successfully used. The chief reason for using animal lymph is that all dan-

ger of communicating other affections, especially syphilis, is thus avoided, although there is reason to believe also that protection is more certainly secured by animal lymph. For securing the cow's lymph numerous farms exist in this country and in Europe, where under the most perfect sanitary precautions, inoculation is practised on the udder of heifers, whence the lymph is gathered and distributed. In Belgium the heifers are slaughtered after the lymph is taken, and if they are not found diseased the lymph is not used. In this country the more usual method is to allow the lymph to dry on ivory points or quills, or to collect it in capillary tubes. Before the use of animal lymph became general the crusts, or scabs from vaccinated arms were preserved and moistened to the consistence of pus before inoculation.

Bacteriology.—The inoculating principle of vaccine virus has not been isolated. Analogy leads us to expect some organism will ultimately be found in the fluid of the pock. Quist has cultivated micrococci, which, he claims, produced in the child a typical vesicle; while Harold Ernst and Martin, of Boston, have isolated from bovine lymph a germ which grows on culture-media and produces, when inoculated in the heifer or children, characteristic vesicles. Klein and Copeman have each found a bacillus and Pfeiffer and Ruffer bodies regarded as psorosperms. Peculiar ameboid bodies have been met in the blood."

The operation of vaccination is variously performed. My plan is to select the site for it and scrub the skin with soap and water and brush or gauze. The water, soap brush or gauze should be sterile, and my own hands are carefully scrubbed beforehand. The site of vaccination is again washed with alcohol, and again carefully washed with sterile water. The cuticle is then removed and serum applied and well rubbed in. After allowing it to dry thoroughly I cover it loosely with sterile gauze and fasten with two adhesive strips. These strips should not completely encircle the arm thus preventing expansion of the tissues when swollen.

Such care in vaccination will prevent bad sore arms which only come from mixed infection and gross carelessness. I have seen some very bad cases of septicemia with general systematic infection, large abscesses, and great danger to life follows vaccination. Bad sore arms are by no means uncommon, and even syphilitic and tuberculous infection are frequently heard of. These two dangers are, I think, wholly eliminated by using the carefully prepared glycerinated lymph which we can secure from a variety of sources. The glass tubes keep the lymph perfectly clean until used. Its removal from the tube by pressure from small rubber bulb is to be recommended and not by blowing through with one end of the tube in the operator's mouth, as I am informed by one of our druggists, was recommended by one of our local doctors.

I have seen one case of tetanus following vaccination in our city during the past year, and this proved fatal in three days. The onset of the symptoms were at about the end the second week, and death occurred in about seventy-two hours.

An editorial comment in Pediatrics has to say:

"The recent epidemic of tetanus following vaccinaion in Camden and other parts of New Jersey has justly alarmed the natives and will, we hope, teach a valuable lesson to practitioners of medicine. At this writing all tests of the virus on white mice and other small animals peculiarly susceptible to tetanus have failed to show the presence of the bacillus tetani or its toxins. The long period which elapsed in many of the vaccinated cases before the appearance of symptoms of tetanus strongly indicated before hand that these test experiments would prove negative. That general practitioners, and public vaccinators, too, for that matter, are liable to be very careless regarding the laws of asepsis is too notorious to require comment. Soap and water, a clean scrubbing brush and a little alcohol, although infrequently employed, are not enough. The needle and spatula must be sterile. The operator rarely cleanses his hands; often when using tubes he blows glycerinated virus out with his mouth, and is liable to blow sputum along with the lymph. This latter in error technique may be avoided by using a small rubber bulb for the purpose, or by using the tube with a glass bulb at one end by heating with the contents of the tube will be expelled. As the tetanus bacillus requires the presence of other organisms before it can elaborate its toxins, it is fitting that every possible source of contamination should be avoided. Dirty children had best have the vaccination-wound dressed aseptically in a surgical manner after the virus and serum have dried."

It is important to have vaccination done in a cleanly place, by cleanly hands in a cleanly manner. In fact, the same surroundings and care are necessary as in performing any aseptic operation. If not then you will have sore arms from mixed infection, and which can be avoided.

The Necessity of, and Indications for, the Bed Treatment of the Insane.

By Frank Parsons Norbury, M. D.,

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Read before the Mississippi Valley Medical Association, Put-in-Bay, Ohio, September 13, 1901.

THE clinical inquiry into the mind diseased contemplates only the possibilities of giving relief from the thralldom of perverted reason. Clinical psychiatry has long since established the truth, that we should approach the study of diseased mind through the routine, and in accordance with the methods of practical medicine.

Etiology should then first concern us for, while we may regard mental disease, in the great majority of cases, as an evidence of degeneracy, yet frequently (I should say most frequently), there exists some cause which hastens or provokes the appearance of insanity. If we can ascertain this cause, revoke its power in its incipiency, there is a possibility that we may

avert insanity, invite evolutionary conditions, destined to arouse sufficient latent potential energy to carry the individual over this period of stress. By so doing we give encouragement to the belief that we may frequently prevent insanity, at least for the present, and lay a permanent foundation for more wholesome mental life in the future. This is not an unwarranted assumption, even in the face of hospital statistics and the extrascientific opinion, which is too prevalent, that inherent conditions found in most cases of insanity, predestines to a life of chronic mental invalidism.

Heredity, it is true, is the most powerful etiological factor in insanity, but it is a law which may work for the patients good as well as paving the way to a life of woe. I like to look upon heredity as a law calculated to preserve the human species which in its workings, never fails to recognize the tendencies to reversion to the normal type, and by gradations saves the good from the waste pile, that it may, if properly cared for and nurtured, impart strong and useful elements in the evolution of a human life. There are, I admit, insuperable difficulties in the way of recognition of the degenerate tendencies, but in the study of disease, it is our duty to solve the problem, as we would disease in other parts of the body. The etiologic conditions are not unlike those producing disease elsewhere in the body, excepting perhaps in those forms of insanity having marked hereditary causes. These forms are (1) vesanic heredity, or the heredity of pure insanity or vesania; (2) cerebral, or congestive heredity, i, e.. the heredity of cerebral affections and general paralysis; (3) neurotic heredity, or that of the neuroses (Regis). Of these types only one (the first) seems to me to be without the border of possible relief from well directed treatment which, indeed, may alter the whole life trend of the individual burdened with inherent conditions.

Internal medicine, I repeat, may, if carefully applied, start the tendencies up-hill, instead of giving impetus to the downward course. For this reason every case of incipient insanity should be given great care and attention. My experience justifies me in asserting that insanity, excepting in pure vesania type, responds readily to treatment. In order to institute early treatment we must have early recognition, and on the family physician depends the responsibility of this recognition, and too, the early treatment. The family physician is invaluable in making a diagnosis in mental disease, because of his familiarity with the health history of the patient, his antecedents and his general social conditions, etc. The family physician is usually better able to give a more truthful, less exaggerated account of the patient, than members of his own family. The important question too of heredity may be best apprcached through him, and with his assistance etiology may be investigated to a fairly satisfactory degree. After an examination of the patient, and with the facts summarized, the special diagnosis of the case can then be made. The distinction as to classification may not be possible until after some time has elapsed, because prolonged observation is frequently necessary in order to make a complete diagnosis. Treatment in general should be commenced as soon as possible—delays are dangerous, and especially so in border-line cases.

Too frequently tentative means of treatment are instituted, thus permitting that golden opportunity—the early days—to pass before well-directed and appropriate treatment is begun.

It is a mistake to regard mental disease as something that will pass away. It is a mistake to permit the patient to be in a great measure his own physician, going on in the circle of his daily life amid the conditions which have contributed to his dissolution and thus laying the foundation, and rapidly too, for a life of mental invalidism or at least a delayed convalescence. The principal necessity at the very beginning of most all cases of mental disease is to look upon their therapeutic needs, just as we should any other disease occurring in the category of internal medicine. The treatment then would be conducted in accordance with the principles of medicine, and not by temporizing, inefficient, inedquate, almost foolish and cruel makeshifts of practice. What is to be done must be done quickly —the therapeutic measures must be promptly applied, having as a base the fact that the principal lesion in insanity is in the brain. Insanity in its incipiency is a functional diminution in the activity of metabolism; "this is borne out by operation of the impoverished body, the attentuated action of nerve currents, the defective blood and other evidences showing a diminished, weakened, impaired bodily nutrition. Mental alteration is but the result of lowered nutrition of the brain, as the phenomena of conduct, of intellect, of will and of consciousness itself, one and all are dependent upon a high degree of activity in the nerve elements." The adjustment then of mind to the material body must be studied along the lines of bodily nutrition. The premonitory stages of all acute insanity, excepting the true vesania type show physical depression, impaired nutrition characterized by disturbed sleep, gastro-intestinal complications, loss of bodily weight and tendency to exhaustion. The brain feels this exhaustion, the over-fatigue, the toxic or traumatic influences, etc., etc., impair the nutrition of the neurons and consequent disturbances of brain cell activity. Barker says, "the dependence of the neurons upon nutrition influences is well shown in certain circulatory disturbances. When the nutrition of the brain falls below a certain minimum the mental capacities become clouded, or may even vanish."

Morbid psychic conditions are over activity, inhibited action, abolition or destruction of function. Inasmuch as the morbid process of psychic dissolution is along the lines of disturbed or faulty nutrition, it is evident that in order to counteract debility, conserve energy and allay irritation, our treatment must be based on a therapy which reverses the dissolution, restores function, prevents waste and promotes resolution. Rest is the prime essential in such treatment, and gives to the exhausted cell the opportunity to renew energy which has been wasted by pathological conditions—by reason of which there is disturbed resistance, modified inhibiory influences, physio-chemical changes, perhaps not sufficient to produce anatomical or histological changes, but yet sufficient to affect mental stability.

Rest given in a natural method and combined with the indications generally pronounced, for the use of associated means of overcoming waste, is sure of results where no organic disease of the brain exists. Weir Mitchell popularized the rest cure in the treatment of nervous diseases, and while the method, as systematized by him, are simple yet it is comprehensive and meets all of the requirements of therapeutic indications. His classic monographs, "Flesh and Blood," "Wear and tear" should be read by every physician as part of their training in the principles and practice of medicine. Rest has, for many years in a modified form, been one of the essentials of practice in mental disease, but we must insist that isolation in a hospital is not all there is to the rest treatment. Isolation is important, but that is only a feature of practice which every institution is supposed to offer. We must go further than this, and as Neisser (International Medical Congress, 1890) advocated, make it a broad and established system.

Rest is in a measure given to every patient by subjecting him to the discipline prevalent in all hospitals, but the more refined application of the principles of the rest cure can only be secured by following the special indications in each case. Rest must be given in bed and in accordance with the methods of Mitchell, keeping in mind the fact that while the hospital is in a sense a refuge, it more truly offers in its services an efficacious means towards the end of producing restoration of reason. It is following the routine of this therapeutic method that we prove every day that application of the rest cure is both scientific and humane. It is a precious therapeutic resource which has not been properly appreciated by the profession as yet, for if it received the consideration due it there would be less temporizing with inconvenient methods and systems and travel; less putting off the inevitable, and more attention given to treatment, methodical and well-directed and along lines destined to conserve energy rather than waste it.

Rest in bed is of the first importance, using restraint if necessary, then give wholesome food, nourishing food, in small quantities frequently repeated. Eggs, egg-nog, milk, milk punch should form the basis of diet, and later such vegetables and meats as will be easily assimilated. In cases of profound toxemia, the diet may be predigested, such as panpepton or liquid peptonoids combined with alcoholic stimulation. Diet should stand next to rest in bed in the order of importance in the place of treatment. As a part of the dietary regulation, perhaps may be included the use of drinking water. Water should be given freely from the very start, as without elimination, we cannot expect to have assimilation. In fact elimination must be promoted at once. I usually find that the border-line cases are constipated, drink little water, have a scant urinary secretion and present every evidence of disturbed elimination. It is a part of my routine of practice to examine the urine of every mental and nervous case, it indicates the state of metabolism and aids in outlining treatment. The blood examination is perhaps of greater importance than the urinary analysis, and when it becomes, as it surely will, a part of the hospital routine necessary

in the diagnosis and treatment of mental diseases, we will hope for more brilliant and scientific results from these institutions.

The laboratory has become an essential part of a physician's office, and it must be used if we expect to achieve intelligent results in practice. It is necessary in the rest treatment to make daily observations according to laboratory methods in order to outline treatment. Treatment becomes easy when our diagnosis is established. Rest treatment is applicable in a wide range of cases, especially border-line cases of neurasthenic type, where a prolonged rest of six weeks to three months will give highly satisfactory results. I have treated during this year in general hospitals a number of such cases, strictly following isolation, enforced rest, over-feeding, massage, electricity, etc., etc. The objection I have to the general hospitals is that, even where facilities are all that they need be, there still is that publicity which during the convalescent stages, will not help the patient on his course, because he in a measure is looked upon as a little queer, and those unintentional, but nevertheless, unkind things are said, which to sensitive persons, as many of these cases are, hurt and cause distress.

I have used the rest treament in cases of acute mania, restraint of course being necessary for a part of the time. I do not restrain them continuously, but at least for two days at the beginning they are in bed, and then eighteen hours or more a day for a week or more, and then for twelve hours, until their strength is sufficient to permit them to be up. Cases of acute mania represent in spite of their apparent strength, not infrequently profound toxemia and exhaustion, their whole condition proclaims the using of energy, in fact the disease itself is perversion of energy, and the indications are to arrest it and bring it back into normal channels. Rest will do it when combined with proper medication and diet. Too frequently sedatives are heroically given in the treatment of mania with the result that toxemia is promoted, secretions are locked up, and elimination, if it has existed, is brought to a stand-still and danger follows. Acute delirium is too frequently treated this way; this condition above all other acute psychoses needs enforced rest, isolation and quiet. Its mortality under the best of conditions is high, but the burden is increased by the lack of rest and of medication.

Rest then is essential in all acute psychoses. In melancholia the rest treatment is especially serviceable and the results very satisfactory. I use it more in accordance with the Weir Mitchell plan. I use rest in all other forms of insanity, also; in circular insanity, it is serviceable during the whole course of the mental depression and part of the period of excitement. In epochial insanities, especially the insanities of adolescence, rest is of special service. I have used it with success in boys and girls just on the border of mental breakdown. The menopause calls for careful observation of patients, and for these cases I prefer the modified rest cure, especially in those neurotic individuals having profound manifestions of the angioneuroses. Elimination, over-feeding and rest will give results here, even when we feel discouraged as to the outlook of the case. Insanities of other forms, such as alcoholic, following drug habits and toxic insanities, post-febrile, and with constitutional or other disease, such as diabetes, Bright's disease, heart affections, etc., rest is indicated and is serviceable, ssociated with other methods of therapeutics.

Fortnightly's Post-Graduate Course

In this department we will present a series of Practical Papers for the General Practitioner, written expressly for this magazine by the leading Medical Writers of the Twentieth Century.

Diseases of the Stomach.

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[CONTINUED FROM PAGE 91.]

CHAPTER XV.—ORGANIC DISEASES OF THE STOMACH—DEGENERATION (CONTINUED).

EROSIONS OF THE STOMACH.

Definition.—A condition in which the mucous membrane of the stomach becomes the seat of small superficial ulcerations. These occurrences in connection with "peptic ulcer" have already been mentioned. They occur more frequently, however, under other conditions and hence deserve a separate notice.

Etiology.—These erosions sometimes occur without apparent cause and may therefore be termed idiopathic. No doubt they accompany those depraved conditions which are characterized by minute ulcerations of the mouth and throat frequently met with in children, and sometimes in adults. Some cases seem to be due to chronic gastric catarrh.

Pathology.—Erosions are often found in the stomach at the autopsy Pathologists agree that these abrasions are not so frequent in connection with ulcer as was at one time believed. Sections made through them as a rule show that the base of the ulcerations almost the entire lower half of the mucous membrane is still preserved. Nothing remarkable can be discovered in the epithelium of these remaining glands; the glands at the sides become longer; the first ones that are intact usually curve themselves over the defect and partly cover it. The recovery seems to take place by the simple aftergrowth of the gland remnents (Gerhardt).

Symptomatology.—Einhorn was one of the first to give proper importance to the discussion of the symptoms of this morbid condition. The symptoms are chiefly *subjective* and consist of (a) pain, (b) emaciation, and (c) a sense of weakness.

(a) Pains occur immediately after meals, but are not usually intense and are independent of the character of food taken. Intervals of entire freedom from pain during which the patient is perfectly well, occur, but

are of variable duration. The pains have no special characteristic, but in rare instances are constant and independent of the ingestion of food.

(b) *Emaciation.*—While patients are usually thin they do not present the cachetic appearance which is observed in malignant diseases. Most cases lose flesh during the first period of their illness, but subsequently retain their weight without material change. The cheeks are thin and somewhat hollow and the jaws protrude.

(c) A feeling of weakness or lassitude is a common symptom. All patients complain of weakness, lack of ambition and inability to work. The strength of body is diminished. The height of these symptoms appears soon after meals and after an hour or less begin to decrease. These exacerbations may occur once a week or once in two or three weeks. Anorexia is an accompanying symptom which may last two or three days. During the attacks the patient may be scarcely able to walk and totally unable to take physical exercise.

Only one objective symptom or sign is usually recorded, but that is of the greatest importance. It is the discovery of small bits of mucous membrane in the wash-water after lavage. These pieces are of a blood red color and about 0.3 or 0.4 c. m. in length and nearly as much in width. In these cases the microscope shows the cells and glands characteristic of the gastric mucosa, and red blood corpuscles. These appearances are most easily observed in the wash-water of the fasting condition. These occur constantly and not irregularly as is the case with accidents from the use of the tube. In this condition seldom is blood found in the wash-water with the pieces of mucous membrane. The water is not stained red, perhaps because the exfoliations of the mucous membrane occur before the lavage. The spots from which the exfoliations of membrane have taken place must present the erosions and their sensitivenesss may explain the soreness in the stomach of which these patients complain. The wash-water becomes stained with blood if coughing occurs during the operation. The muscular contractions which occur during the coughing probably cause an oozing of blood from the abrasions and this stains the water. If this exfoliation should be general or if it should be recurrent in the same spot, in either case there is a resemblance to similar conditions which sometimes are observed on the skin. This condition sometimes extends to the intestines. I have lately seen a case in which such pieces of mucous membrane were passed in the feces as demonstrated by careful miscroscopic examination. Occasionally the amount of hydrochloric acid is increased as in ulcer; but usually the stomach contents contain a deficient quantity of this acid. Some cases are always characterized by a considerable amount of mucus. The course of the disease is usually chronic; it may extend over several years; yet it may be characterized by intervals of freedom from active symptoms. It does not appear that these erosions ever originate true peptic ulcers.

Treatment.—Local treatment is of the greatest importance. Nitrate of silver should be used in solution or spray. The use of this astringent produces excellent results. The effect is soothing, sedative, alterative and

healing. It may be used in solution by lavage with apparatus shown in Fig. 8.

The evidence that this method of treatment is beneficial is shown by the disappearance of mucus membrane from the wash-water after lavage, and improvement in the patient's feelings and condition, including the disappearance of pain and weakness. The strength of solution for lavage is a one-tenth or two-tenth per cent, or seven to fifteen grains to a pint (0.5 to 1.00 to 500). Two and a half drachms (10c. c.) of the same solution may be sprayed into the stomach by Einhorn's apparatus (Fig. 13). This may be done once a day or once in two days.

Galvanization is an excellent adjuvant to this treatment. When it is desirable to use electricity it may be alternated with the nitrate-of-silver spray. The positive electrode should be intraventral after a pint of sterilized water has been introduced into the stomach, and the negative electrode (stabile) stationary over the epigastrium or (labile) moving from side to side over the epigastric region. The strength of current varies from 10 to 30 milliamperes usually.

Diet is important, but only or chiefly as relates to its local effect. Bland food should be prescribed. Nothing that will cause mechanical or chemical irritation should be permitted. Hence hearty meals of meat and vegetables, salads, pastries, pickles, coarse breads and irritating dishes must be avoided. Frequent moderate meals are to be advised.

Hygienic regime is desirable, as bathing, calisthenics and moderate out-door exercise.

The medicinal treatment is limited to the use of such tonics as nux vomica and mild preparations of iron as Gude's Pepto-mangan and the albuminate of iron, and remedies to meet indications as they arise. Einhorn recommends condurango.

CHAPTER XVI.—ORGANIC DISEASES OF THE STOMACH.—DEGENERATION (CONTINUED).

CANCER OF THE STOMACH.

Synonyms.—Carcinoma of the Stomach. Carcinoma Ventriucili. Malignant Disease of the Stomach. Gastric Cancer.

Varieties.—Scirrhus (hard, fibrous); Medullary (soft, fungoid encephaloid); Colloid (gelatinous, mucoid, alveolar); Cylindrical-epithelioid (collumnar or cylindriacal-celled or cylindrical epithelioma, cylindrical-celled cancroid, destructive adenoma).

Definition.—A morbid, usually rapidly proliferating, growth, consisting of erratic epithelioid cells contained in connective tissue alveoli. It spreads rapidly into surrounding tissues, produces characteristic symptoms, ordinarily occurs in those past middle life, and always terminates fatally.

Etiology.—The question of heredity is not definitely settled. Undoubtedly heredity exerts a powerful influence in so far as tissue structure is concerned. If the physical characteristics of a family include a faulty

mucous membrane, it is rational to suppose that such membrane will be more readily invaded by the agencies of disease, other things being equal, than other and more perfect tissues, when those agencies or causes affect the body. It is a matter of common observation that a case of gastric carcinoma frequently occurs in a family which has a history of that disease. It is sometimes discovered that lupus or some other neoplasm of malignant type has occurred in the family. The recurrence of such experiences make it probable that heredity influence is one of the strongest predisposing causes.

The frequency of gastric cancer cannot be accurately stated. Statistics have been compiled by different authors, but while great care has been exercised the nature of the disease, the great number of cases which occur in private practice where post mortem examination is denied, and the frequent obscurity of the disease render statistics unreliable. Welch has made an exhaustive study of this field and estimates that in persons above the age of twenty years cancer of the stomach causes 1 per cent of all deaths. The frequency of cancer in the stomach as compared with the rest of the body is interesting; the author reports in 31,482 cases of primary cancer that 21.4 per cent were located in the stomach.

Many authors agree as to the relative frequency in male and female, and find that sex exerts no appreciable influence, the male being slightly more susceptible, and this apparent showing against them may be caused by their greater liability to exposure to traumatic and other probable causes.

Age exerts a greater influence. In children the disease is rare, but it occasionally occurs. It increases in general to the age of 70 after which it decreases. The age most susceptible to cancer lies between 41 and 70, perhaps 75 per cent of all cases occurring within this limit; but the greatest number of deaths occur between 50 and 60. Cancer of the stomach occurs less frequently among negroes than whites in the ratio of, perhaps, 66 to 100. It is more frequent in Europe than in America, and among civilized than uncivilized races. Gastric ulcers, chronic gastritis, traumatisms, the action of corrosive poisons, and occupation have been assigned as causes.

It is generally admitted (Hanser) that gastric ulcer, either open or cicatrized, may cause cancer. It is most likely to occur in large and deep ulcers with thick and indurated edges where there is little or no tendency to heal. It is nearly if not quite, impossible to prove that chronic gastritis causes cancer. These two diseases are characterized by similar symptoms, especially in the earlier stages, and until positive elements can be discovered by the microscope we are unable to decide whether cancer ever develops out of a chronic catarrh; that it is possible, however, we may admit. As to traumatic injury, corrosives and occupation we may hold that little is known and nothing proven. In private practice one is frequently led to believe that such agencies do exert an influence. In one case a laborer was struck in the stomach with an ax helve. The stomach remained sore and the epigastrium tender. In a few months he complained of constant pain. Examination revealed a tumor and symptoms of cancer, of which disease he eventually died. Another case in a farmer resembled

this closely, and I suspected cancer. Within less than a year he died of that disease. Closely connected with heredity is Cohnheim's theory of misplaced embryonic cells. As this is a matter not susceptible of demonstration, it need not be included in the probable causes of cancer. It has not been proven that bacteria cause cancer.

Pathogenesis.—It has seemed to me that the location of the great majority of cancers of the stomach at or near the pyloric orifice might suggest another fact or in the etiology of this disease. The most active peristaltic motion of the viscus is in the pyloric half. The constant contraction with the variation in the calibre of the blood vessels which would result from this might make this area especially irritable and the continued pressure required to drive the food through the pylorus, especially undigested and hard particles, would eventually set up an excess of development of tissue or the growth of cells—in some instances a hyperplasia, in some a fibrous growth, in others perhaps, an epithelial disturbance, which finally takes on cancerous features.

Should the microbic theory be demonstrated as being correct, this irritative condition might hold as showing that a suitable soil for the growth of bacteria had been thus established. This is similar to the "physiological irritation" theory of Virchow which may suggest the origin of many of these cases.

Cohnheim presented the theory that in the development of the fetus certain embryonic cells are misplaced or become especially persistent; their awakening, excitation or abnormal irritation in later life develops the morbid growth, and on account of the complexity of its structures the pylorus is most affected.

Pathology.—It matters little what view of the cause of cancer we accept or what particular theory of the origin we adopt, the method of the development of the tumor, its manner of growth and the elements of its structure are the same and are well known. The following are characteristics: 1. The tumor is hard. 2. It tends to infiltrate the connective tissue. 3. As a rule the contour is not sharply defined, i. e., the tumor cannot be enucleated. 4. It tends to ulcerate. 5. Usually the tumor is single.

Most cancers of the stomach are primary, but secondary growths may occur in cases of cancer of the mouth or esophagus. The cells in the primary growth are generally spheroidal, but sometimes they preserve their surface type and maintain the cylindrical form; while in the secondary variety the flat-cell may prevail.

The first activity of a cancer is a proliferation of the epithelial cells in the mucous membrane. There is a strange tendency for these cells to push into the subjacent connective tissue. The process is not greatly unlike that of glandular cancer. Instead of forming a covering for other tissues as they usually do they forget, so to speak, to perform their functional duties and push into and distend the interfibrillar spaces and continuing to grow they convert these spaces into alveolar cavities. In the center of these cell masses are seen concentric arrangements of epithelial

cells called the cancer cell-nest. In examining for cancer in wash-water or tissue we must look for these cell-nests (Fig. 15). The destruction of the fibrous tissue interferes with the function of the glandular structures. In fact the glands become involved, and it has been taught by Waldeyer and others that the first proliferation may begin in the peptic glands as well as in the mucous glands near the pylorus. This atypical glandular proliferation bursts the muscularis mucosae and extends into the submucosa, where circumscribed cancerous nodules are formed, the coalescence of which produce the subsequent flattened growth. At the same time an active growth of the connective tissue is going on which soon exceeds the glandular proliferation. This induces an hypertrophy of the connective tissue while the glandular elements remain normal. This proliferation of connective tissue extends along the tubules and shows itself as a small-celled infiltration about the glandular nodules. The amount of this infiltration determines the degree of hardness which has given rise to the various designations that have been enumerated as synonyms. In the very hard variety, scirrhus, where the connective tissue cells or fibrous formations greatly exceed the glandular, cell-nests are not so abundant as in the soft or encephaloid form where the glandular elements are increased. A milky colored juice can frequently be expressed from these cancerous tissues, even in the harder varieties, especially when in a state of fatty degeneration. When they show signs of ulceration a rich vascular network and diffuse redness is observed in the threatened area which occurs in three-fifths of all cases (Fig. 16).

The scirrhus is most often seen at the pylorus where not unfrequently it causes stricture by forming a ring around the organ. It may appear as a circumscribed tumor or as a diffuse thickening of the walls of the stomach. It consists largely of dense fibrous tissue with few and small alveoli. The ulcerations are superficial. The encephaloid variety grows rapidly and soon infiltrates the entire gastric wall and forms large, irregular processes which projecting into the stomach easily ulcerate. It is here that ulceration is most common. This soft form is grayish—or reddish-white in color, and contains an excess of cellular over fibrous elements. Metastasis is more frequent than in any other form.

While the cylindrical-celled epithelioma more closely resembles the encephaloid cancer, it is occasionally hard like scirrhus, especially at the borders.

Colloid shows itself as an extensive, rather uniform infiltration and thickening of all adjacent layers of the stomach wall, and may involve the peritoneum.

The different varieties do not occur with equal frequency. Scirrhus is present in 75 per cent of all cases according to Brinton; while colloid occurs in 2 to 8 per cent; but Rindfleisch does not allow so great a difference.

It may be stated that the locus or origin has not been definitely settled. The older authors divided gastric cancers into mucous and submucous; Waldeyer, as already mentioned, considers that they may be mucous or glandular; while Rindfleisch says they arise in the mucosa proper.

When the mucous proliferation begins it passes at a very early period to the submucosa. This may in part account for the apparent disagreement among authors. The cancerous proliferation proceeds more rapidly in the submucosa, because of the wide and numerous nets of lymph-vessels. The cancer spreads under the mucous membrane which is movable upon the growth and often this covering is attached at only one point, the point of original departure and, consequently the oldest part of the degeneration.

Besides the great frequency of ulceration in the soft cancer, the surface of the ulceration may include several square inches, surrounded by a thickened, infiltrated, edge of mucous membrane. The tumor frequently arises at the lesser curvature and includes both anterior and posterior walls. This surface is covered with shreds of tissue, the remains of cancer stroma, which when washed withstand the destructive action of water somewhat longer than cancer-cells.

These cells are loosened gradually, under the action of the gastric juice and give rise to the characteristic hemorrhages which occur in the disease. The blood is rapidly coagulated and appears in the vomit as sediment with a brownish or chocolate color, like coffee-grounds, or if fibrous debris is present it has the appearance of the dregs of beef-tea.

The scirrhus form is of slow growth and as already stated usually occurs near the small curvature where it tends to form a ring around the pylorus; the mucousa and submucosa are changed to a white indurated, compact structure, 1-6 to $\frac{1}{4}$ of an inch (4 to 6 mm.) thick, making the small portion of the stomach appear as a rigid tube $1\frac{1}{2}$ to 2 inches (38 to 50 mm.) in diameter, while the larger portion hangs loose and baggy at its end. The form of the cell-nests is irregular.

Rindfleisch states that the gelatinous form is characterized by a predominant tendency to destruction, and constantly attains the condition of a girdle tumor before it ulcerates. It may also cause stenosis. The scirrhus and gelatinous cancers would be less dangerous than the soft or encephaloid were it not for the possibility of these forms extending to the peritoneum. All these varieties have a tendency to extend to and involve contiguous organs. The muscular coat is involved after the submucosa. Especially characteristic of carcinomatous infection is the tendency of the infiltration to trace out the narrow lines of interstitial connective tissue. Hyperplastic thickening is a necessary result, except in encephaloid. It is this condition which causes the muscular coat to be frequently thickened three to five times its normal measure. Not unfrequently, especially in scirrhus, we find well-marked signs of interstitial inflammation, the tubes being atrophied, and often reduced to mere bulbs and filled with fatty cells. Alterations in the shape of the stomach are occasionally observed as effects of cancer; and these alterations may affect the relations of the viscus to the adjacent organs. These relations are sometimes so rapidly changed, and infection of adjacent organs so liable to occur that opertions to prove successful must be undertaken early in the disease. Hemorrage may occur, and occasionally result fatally.

[TO BE CONTINUED.]

Monographs on Nervous Diseases

With Especial Reference to Hygiene, Nursing and Therapeutics.

Apoplexy (Cerebral Hemorrhage).

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PHILADELPHIA,

Professor of Nervous and Mental Diseases in the Medico-Chirurgical College of Philadelphia; Neurologist to the Philadelphia Hospital.

WE shall not detail the clinical symptoms of apoplexy. By this term is generally understood hemorrhage into some part of the brain, and in the majority of instances, the bleeding is from the lenticulo-striate arteries. These supply nutriment to the important ganglia at the base of the brain and motor cortex, with their projectile fibers that ultimately extend to the spinal cord; and from this, transfer nerve energy to the lower neurons. Apoplexy is sometimes called a "stroke" or paralysis; and while paralysis is the usual result of a hemorrhage into the central nervous system it is more exact to speak of apoplexy than any of the other terms commonly used by the laity. The physician understands a broader definition of apoplexy even than the above given; that is thrombosis of cerebral blood vessels or embolism, which though more limited practically produces similar signs and symptoms, the former insidious, the latter sudden. As the care and nursing in these three conditions would not vary, it will be unnecessary to more than mention them. The predisposing causes of true apoplexy are in the following order of occurrence: first, chronic alcoholism; secondly, syphilis; thirdly, other infectious diseases. The predisposition to cerebral hemorrhage with what might be called the normal sclerosing or hardening of the vessel walls due to advancing years, must be considered; and here it is especially that heredity plays an important role in causation. In proportion, then, as persons past middle life develop arterio-sclerosis, will the tendency to this serious malady occur. Night or early morning hours are the most favorable times for cerebral hemorrhage, and especially for embolism and thrombosis. Singularly, it often happens when the patien thas been feeling particularly "well," although it will be found there have been some days or months of sense of vertigo with fleeting attacks of congestion of the brain. The attack may appear in such a predisposed individual following exertion, straining at stool, or after partaking of a hearty meal.

Signs of Attack.—Rather sudden loss of consciousness preceded by thickness of speech or motor aphasia, accompanied with flushing of the face, extreme objective vertigo, followed by falling in a helpless manner if the patient is standing or sitting. With this, there is more or less stertorous breathing, and perhaps clonic convulsions will precede the ultimate paralysis which is usually of one side of the body owing to the location of the hemorrhage on the opposite side of the cerebrum. It will now be found

within a half-hour, the temperature of the patient will rise slightly, the coma become more profound following the immediate general restlessness which is seen just after the stroke. There is some hyperasthesia of the paralyzed side as shown in a few cases where the coma is not too profound. The increase of temperature is more marked on the affected side and averages a half degree by the axiliary record or less by surface thermometers. The paralyzed extremities when raised from the couch will drop flail-like; the patient occasionally on partial recovery, will, however, be able to move the other side of the body. There may be, also, retention of urine which must be guarded against by the nurse. The deep reflexes on the paralyzed side are always diminshed or absent in this stage. And there is that singular phenomenon of conjugate deviation of the eyes, or a turning of the eyes away from the paralyzed side in cerebral lesions.

At the end of three or four hours, if the case does not go on to a fatal issue, the patient begins to improve. The coma now becomes less profound; the reflexes appear again in the paralyzed side; the patient begins to move muscles of the same, perhaps an extremity; and he may turn from the supine position in which he lay, to one or the other side—generally the paralyzed side. Here it is, the nurse should be instructed as to care to prevent pressure paralysis, which may be caused by lying upon the enfeebled arm, and I have seen this accident occur to an otherwise well-trained interne. Gradual restoration of speech takes place in the majority of cases, although there may remain some form of dysasthria as "thickness" of speech for some months in even the most promising case for large recovery of power. There is also difficulty in swallowing and the saliva may dribble from the mouth for some months. As a rule, the tongue is protruded towards the paralyzed side and the face drawn towards the sound side; although there is no disturbance of taste. The muscles of the paralyzed side do not degenerate in the sense of producing "reaction of degeneration" by the galvanic current; and there is no true trophic wasting, only that due to disuse of the affected members. In the average case, at the end of a few weeks, the patient will be able to move about with the assistance of crutches or cane. The manner of progression will be typically characteristic of the so-called hemiplegic gait. The affected limb is thrown out and forward describing the arc of a circle and then the foot is dropped down flail-like upon the ground. This peculiarity in walking is caused by the patient throwing his trunk forward and to the sound side; due to the fact that the extremity being paralyzed, compensatory movements and muscular effort must be made by the other limb. Substituting this flaccid hemiplegic gait, in the course of a few weeks, the patient develops spasticity of the muscles of the affected side; and now the paralyzed member is, with the partially regained power, pushed along in a spastic fashion, the toe being "dug" into the ground, as the laity's expression goes. The affected arm which has hung flail-like improves more slowly as to power than does the lower limb, but with the return of power, flexion of the elbows and fingers take place. This is due to secondary contraction of the flexor muscles which are disproportionately increased in power over the extensor group of muscles. In the course of the affection, there will be found sec-

ondary degeneration, and this may extend to the opposite side of the spinal cord causing great increase of the deep reflexes on both sides of the body. As the case progresses, joint symptoms are not unusual; the disuse of the joint and lowered trophic condition sets up a low grade arthritis, the affected joint becomes painful and semi-ankylosed. There may also be set up subacute neuritis in the affected extremity. Great wasting of the extremity is the exception. There is never reaction of degeneration of the paralyzed muscles in cerebral lesions, as already referred to in a previous paragraph.

Diagnosis.—The history of an apoplexy with consequent hemiplegia is the important point. Embolic apoplexy is to be diagnosed largely by history of cardiac disease and in the finding of a well marked organic heart disease, as shown by murmur over the precordia. In embolic apoplexy, too, there is not so constantly, disturbance of consciousness and the sequent paralysis is very apt to be more permanent and localized. Following the embolic form also, careful examination may reveal alteration in the physical signs of the existent heart disease, for instance the murmur may partially disappear, or at least change in quality very materially. In thrombosis, there is no actual way of telling, except by noting previous history of thrombosis in other parts of the body and by extensive arterial degeneration.

Prognosis.—About 50 per cent of cases of apoplexy recover from the attack, 75 per cent of these are very apt to have recurrence; the remainder go on through life with muscle paralysis of the parts involved, life being perhaps curtailed on an average, by a decade. The expectancy of life in these cases, therefore, is relatively proportionate to the heredity of longevity.

Treatment and Nursing.—In the apoplectic attack, the patient should be guarded very carefully; placed in the supine position with the head partially elevated; ice caps should be placed on the head and hot water bottles to the feet, being careful not to burn the patient since obtunded sensation or the unconsciousness would prevent the feeling of heat. Friction to the lower extremities will aid in restoring circulation here, and thus favor the relief of congestion in the brain. The nurse should see that the patient's mouth is clear: any denture or other foreign body should be carefully sought for, since there would likely be strangulation from this source. It may be necessary, in some cases, to produce traction on the tongue by means of a handkerchief or an artery forceps clipped on to the tip of the organ. Respiration can also be aided by elevating the larnyx with the tips of the thumb and index finger of the nurse. The inhalation of oxygen is a method I have nowhere seen used, but is scientifically ideal for oxidation and should be tried in serious cases when other methods have not availed. The revulsant action, so-called, should be brought about by a sharp cathartic. For this purpose, croton oil is employed by the physician, three or four drops being placed upon the tongue directly or through the agency of a little sugar. The reason for this therapeutic measures is in its congestion into the mucous membrane with great exudation of serum from the blood here, and in cosequence of such local and general depletion, the marked re-

lief of the congestion in the brain. Venesection and bleeding by leeches are important in sthenic cases. At the end of forty-eight hours, small quantities of milk may be administered; although for some days, there should never be excess of nutriment placed in the stomach. The patient should be kept warm with especial attention, however, to ventilation and stimulants should be eschewed save in some cases, the use of srychnia which the physician prescribes for heart failure, etc., only. In the "getting up" of the patient as indicated before, exercises should be sparingly indulged. The time of sitting up which is an important item, should be very gradually increased from day to day until there is a proper adjustment of the altered and hampered circulation. A patient generally has to employ crutches in his first endeavor at walking and this should be encouraged until sufficient power has been regained, when the crutches can be substituted by a cane. When contractures begin in the paralyzed extremities, and even before this to prevent said deformities, it is wise to employ massage and stretching in the affected members. The use of iodide of potash is the most valuable remedy at our command for the absorption of the exudate in the brain; and I have seen some wonderful results accomplished with this drug, especially in the specific cases where the remedy can be gradually pushed up to several hundred grains aday. Extra exertion as in lifting should be guarded against; the bowels kept regular, and the patient live a life much under his usual method. With this outline, subjects of apoplexy I have seen live many years in fairly comfortable health, although hampered considerably as to motion.

Cases of cardiac disease are always more serious since the patient's life is menaced by the fact that a vegetation may be carried into the brain at any time. Other diseases of the brain we shall discuss at a subsequent period of this course of practical discussions in neurology intended for the general practitioner.

Tetanus Following Vaccination.—Dr. Joseph McFarland, professor of pathology and bacteriology at the Medico-Chirurgical College, Philadelphia, is engaged in a critical analysis of those cases in which tetanus has followed vaccination, with a view to determining their etiology, and desires to secure all the data possible concerning such cases. He would like to communicate with any of our readers who have had or who know of cases of this character.

Norwegian Deaf Mutes.—A Norwegian scientist has recently compiled statistics of all the deaf and dumb persons in his country, with objective data in most cases. Half are congenital defects. Of the cases of acquired deafness, one-fourth were consecutive to scarlet fever, the rest mainly to cerebral and middle ear affections. The influence of heredity is marked, especially the heredity of consanguineous marriages, although the inheritance of deafness and dumbness frequently alternates with other abnormalities—idiocy, epilepsy, malformations, retinitis pigmentosa, etc. He attributes the preponderance of deaf and dumb children in consanguineous marriages to the accumalation of family peculiarities.

Clinical Notes on the Use of Triferrin.

By L. H. Warner, A. M., Ph. G., M. D.,
NEW YORK.

THE general constitutional influence of the virus of syphilis exhibits itself from first to last in the blood. From the beginning of the infection we note "slight decrease in red cells," which is soon followed by a gradual, but steady, reduction of hemoglobin. Mercurial treatment tends to slightly increase both hemoglobin and red cells during the first few days of treatment, but after that a steady decline in both follows. The anemia of syphilis often becomes so severe as to stimulate pernicious anemia. The continuous administration of mercury frequently leads to salivation or cachexia, which is exhibited by anemia, pains resembling rheumatic pains, digestive leucocytosis and general malaise. I have frequently noted that the mercury was discontinued at such times to be replaced by the administration of one of the iodine salts. The only results derived from such change of medication seems to be the disappearance of rheumatic pains. Examinations of the blood before and after medication reveal no abatement in the degree of anemia or digestive leucocytosis, and clinically the poisonous effect of the iodides may manifest itself by various skin eruptions. At such times mercury and iodide treatment as a rule are discontinued to give way to a tonic treatment. Iron in the various forms is undoubtedly the therapeutic agent upon which we rely, but the selection of the correct iron combination becomes of the greatest importance. Ferrum chloridum, ferrum carbonatum, ferrum reductum, or the combinations of iron albuminate, iron and manganese, etc., all exhibit their physiological action by causing an increase of hemoglobin and red corpuscles, but at the same time they cause constipation and headache. Whenever these iron preparations are administered during the intermittent treatment of syphilis, we will note no change in the histological structure of the leucocytes, and a chemical examination of the urine will always show an excess of phosphatic elimination, which in turn denotes tissue waste and cell destruction. The most rational iron combination, brought to my notice through reports from some of the German clinics, is known as ferrum paranucleinicum, or triferrin. I submitted this iron combination to various chemical and biological tests prior to introducing it in the clinics, and found it to be an organic iron compound. Only in organic form can iron be rapidly absorbed and utilized in the body. The following tables give clinical histories of four out a number of cases on triferrin medication.

BELLEVUE OUTDOOR CLINIC.

August 8th, 1901. Ward C, No. 14. F. M., age 39, driver. Disease, syphilis. Has been on mercurial treatment since January last. Complains of general malaise, loss of appetite, loss in weight, pains in lower extremities. Blood examination August 18th, 1901; hemoglobin, 41 per cent; red cells, 2,900,000 white cells, 11,100. Red cells are misformed,

few crenated cells with ameboid movement. White cells, 72 per cent, polynuclear leucocytes, some with beutrophilic granulations, few eosinophiles. Mercurial treatment is discontinued and 10 grams triferrin ordered three times daily. (Triferrin dispensed in cachets.) Within a few days patient shows a decided improvement, appetite returns, rheumatic pains have disappeared and ambition returns. August 15th, hemoglobin 40 per cent; red cells 3,210,000; white cells 10,300. Red cells appear better in form and color. White cells, polynuclear, 49 per cent, lymphocytes, 21 per cent. No eosinophiles. Triferrin gr. x t. i. d. is continued and patient continues to gain generally. August 25th: Hemoglobin, 53 per cent; red cells, 3,400,000; white cells 10,000. Red cells well formed, white cells polynuclear, 43 per cent, mononuclear, 7 per cent; lymphocytes 23 per cent, no eosinophiles. Patient has not returned to continue further observations.

Date.	Hemoglobin	Red Cells	White Cells
August 8th	41 per cent	2,900,000	11,000
" 15th	49 "	3,210,000	10,000
" 22d	53 "	3,400,000	10,000

in two weeks 12 per cent gain of hemoglobin and 500,000 red cells.

Ward C, No. 23. D. H., age 27, clerk. Disease: Syphilis. Contracted disease during Spanish-American war and since then has been under mercurial treatment in various clinics. Since July has been too weak to be about. Has lost in weight, no appetite, general malaise. The use of tonics has always been followed by constipation. Aug. 8th, 1901, blood examination reveals hsmoglobin, 31 per cent, red cells, 2,710,000, white cells, 13,000. Red cells misformed, some crenated red cells with ameboid movement. White cells, 76 per cent polynuclear, 23 per cent mononuclear, some stray eosinophiles and lymphocytes. Patient is placed on triferrin gr. x t. i. d., all mercurial medication being stopped. Patient improves, headache and general malaise disappear and is not troubled with constipation. Aug. 15th decided improvement: Hemoglobin 42 per cent, red cells, 3,050,000, white cells, 10,400. Red cells more regularly formed, white cells polynuclear 51 per cent, mononuclear 11 per cent, lymphocytes 37 per cent. Few stray eosinophiles. Triferrin gr. x t. i. d. is continued. Patient gains in weight, ambition returns, appetite good, in fact patient states he feels better than he has for two years past. Aug. 22d continued improvement: Hemoglobin 53 per cent, red cells 3,300,000, white cells, 9,900. Red cells well formed, white cells, polynuclear 45 per cent, mononuclear 10 per cent, lymphocytes 43 per cent, eosinophiles 1 per cent. Patient leaves for home and further observations were impossible.

RECAPITULATION.

Date	Hemoglobin	Red Cells	White Cells
August 8th	31 per cent	2.710.000	13.000
" 15th	42 per eent	3.050.000	10.400
" 22d	53 per cent	3.300.000	9.900

gain in two weeks: 22 per cent Hemoglobin, 590,000 red cells.

Ward D, No. 3. Annie M., age 31, housework. Syphilis. Does not give history of case, but admits having been treated for sores in mouth and eruptions on body for last three months. Has taken biniodide tablets. Complains of severe spasmodic pains, general malaise, headache. Blood examination reveals: Hemoglobin, 37 per cent, red cells, 2,830,000, white cells, 10,700 (digestive leucocytosis), polynuclear, 72 per cent, mononuclear, 27 per cent, some basophiles and eosinophiles. Patient is placed on triferrin in gr. x t.i.d., all mercury treatment stopped. Patient improves daily, pains and headaches disappear, bowels more regularly, appetite increases. August 15th: Hemoglobin, 45 per cent, red cells, 3,015,000; white cells 9,900. Red cells more uniform, white cells, polynuclear, 55 per cent, mononuclear 21 per cent, lymphocytes 25 per cent, eosinophiles 1 per cent. Triferrin gr. x every four hours is ordered. Patient continues to improves generally, has more ambition and is anxious to do some work. August 22d: Hemoglobin, 54 per cent, red cells, 3,310,000, white cells, 9500. Red cells are uniform and well filled. White cells polynuclear, 46 per cent, mononuclear, 24 per cent, lymphocytes, 29 per cent, eosinophiles, 1 per cent. Patient leaves to return home.

RECAPITULATION.

Date	Hemoglobin	Red Cells	White Cells
August 8th	37 per cent	2.830.000	10.700
" 15th	45 "	3.015.000	9.900
" 22d	54 "	3.310.000	9.500

gain in two weeks, 17 per cent hemoglobin, 480,000 red cells.

Ward 6, No. 9. D. B. W., age 43, housewife. Disease, anemia. Patient as been complaining of ill-health for some years. Has had typhoid fever and subsequently severe cold. Coughs a great deal. Menses have disappeared for last three years. Clinical examination reveals no tubercular lesions. Appetite very poor, loss in weight. Has taken various tonics which cause gastric disturbance and constipation. Has been living on juice of rare meat, eggs, milk and toast. August 8th: blood examination reveals: Hemoglobin 34 per cent, red cells 2,220,000, white cells, 14,000. Red cells are much distorted and pale in color. White cells, polynuclear, 47 per cent, mononuclear 49 per cent, lymphocytes 4 per cent (digestive leucocytosis). Patient is ordered to continue same diet and take triferrin gr. x t. i. d. in milk. Within a few days marked improvement is noted. Appetite increases, headaches and constipation disappear. August 15th: Hemoglobin 42 per cent, red cells 2,560,000 white cells 11,200. Red cells are more regularly formed, white cells, polynuclear, 43 per cent, mononuclear 28 per cent, lymphocytes 28 per cent, eosinopiles 1 per cent. Triferrin gr. x t. i. d. in milk is continued and patient continues to improve. Does some light work about the ward, sleeps and eats well, gains in weight. Color returns to lips and cheeks. August 22d: Hemoglobin 52 per cent, red cells 2,820,000, white cells 10,300. Red cells well formed with, but few exceptions, white cells, polynuclear, 41 per cent, mononuclear, 23 per cent, lymphocytes 35 per cent, eosinophiles 1 per cent.

Patient has gained 12 pounds in weight during two weeks' treatment. No further blood examination was made, as patient left hospital on August 28th.

RECAPTULATION.

Date	Hemoglobin	Red Cells	White Cells
August 8th	34 per cent	2,220,000	14,000
" 15th	42 "	2,560,000	11,200
" 22d	52 "	2,820,000	10,300

gain in two weeks: 18 per cent hemoglobin, 600,000 red cells.

The uniformity of good results in these cases attributable to the physiological action of triferrin stamps the products as one of highest merit. I have already given my reasons, why I prefer an organic iron compound, and in this preparation I believe we have a nucleinic iron product which will rapidly increase the hemoglobin, will strengthen and augment the red blood cells and will cause the creation of young leucocytes. Examination of the urine of all four of the above cases on August 8th revealed in every instances excessive elimination of phosphates, while subsequent examination on August 22d showed a normal percentage of phosphates.

NEW SURGEON-GENERAL.—The President has appointed Dr. P. M. Rixey surgeon-general of the navy.

REASONS FOR EMPLOYING HOT AIR.—1. Dry heat is a valuable pain reliever without any of the depressant effects common to drugs. 2. In connection with constitutional and medicinal treatment, we have in it a positive curative agent. 3. It is a stimulant to rapid repair and absorption. 4. It is one of the most valuable eliminative agents we possess. 5. Where indicated, it possesses a sedative action on the nervous system obtained by no other means.

GIFT OF DR. SENN.—Dr. Nicholas Senn recently gave to Rush Medical College $50,000 for building the best equipped structure for clinical work in the West. Recitation rooms, dispensaries and laboratories will be equipped with latest improved appliances. A covered bridge will connect the fourth floor with the Presbyterian Hospital building. Two amphitheaters for clinical work, capable of seating 150 students, will occupy the upper part of the building.

OSTEOPATHY BILL.—A delegation from the New York Medical Association appeared before the Judiciary Committee of the State Legislature on January 29 to oppose this bill on the grounds that it allows the members of the Osteopathic Society to register and receive a license to practice without examination, and permits graduates of the Western osteopathic colleges to practise in New York State on presentation of their diplomas and a payment of $10. The bill also allows them to sign birth and death certificates, and their handling of contagious diseases is a menace to the community.

The Reviewer's Table.

Books, Reprints, and Instruments for this department, should be sent to the Editors, St. Louis.

PRACTICAL FIRST PRINCIPLES.—Simplifying the study of normal and abnormal structure and function, and aiding diagnosis. Designed for the use of students and practitioners of medicine. By A. H. P. Leuf, M. D., associate editor of The Medical Council, Philadelphia. Published by The Medical Council, Twelfth and Walnut streets. Nearly 50 illustrations, almost all new and original. (Price $1.00 net.)

This work is original in conception, is true, and recognizes the detached mode of instruction now and always in vogue in the teaching of medicine, on which account it has been offered to the profession to make up this deficiency by supplying the connecting links between the various departments. To the student beginning the study of medicine it gives a comprehensive resume of some of the most important principles which he has to continually apply, easing his understanding and greatly simplifying his studies. It teaches underlying principles and their general application, so that a fact learned of one tissue applies equally to all. Thus inflammatory processes are divided into acute or chronic, and parenchymatous and interstitial. Once the easily remembered facts of these inflammatory changes are understood of one tissue, they become applicable to all, so that if the histologic structure and the function of a part are known, its significance and symptomatology may be quite accurately inferred. The book is the nearest approach to a royal road to knowledge that we have ever encountered. It eases the work of the student and simplifies that of the practicing physician. It is to be read and re-read, studied, digested and absorbed. Beginning with protoplasm and the cell, it proceeds in sequence to the consideration of tissues, organs, apparatuses, systems, the body as a whole, cell nutrition, cell physiology, cell pathology, general principles, their illustrative application, nomenclature, and an appendix dealing with an explanation of the microscope. There are few men who do not need this book and none who can regret having it, provided they are true students and conscientious practitioners. To all such it will prove, as it is intended to be, a source of pleasure and of profit.

THE STANDARD MEDICAL MANUAL: A Hand-Book of Practical Medicine. By Alfred S. Burdick, M.D., Junior Professor of Practice of Medicine, Illinois Medical College. Illustrated. Chicago: G. P Engelhard & Co. (Price, cloth, $4.00.)

We believe firmly in such manuals—they have worth to the busy man as desk companion for ready reference. To the consulting, physician or the metropolitan practitioner surrounded with books and literature galore, such a book may seemingly be somewhat out of place, but we think not. Every one can profit by carefully selected compilation of the very latest literature on practical medicine. Burdick, whom we know personally, to be a scholar, hence appreciative of the new and valuable in literature, has

presented in this volume a wealth of clinical facts and therapeutic suggestions, which he has sifted from the vast mass of current medical literature. He has arranged the subjects in alphabetical order, treating each subject as follows: Etiology, pathology, symptoms, diagnosis and treatment. We take pleasure after carefully reviewing the book and using it for a month on our desk as a working manual, in recommending it as of great value, very helpful and decidedly in line with the progressive spirit of the age. F.P.N.

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The Practice of Obstetrics. By American Authors. Edited by Charles Jewett, M.D. Revised and enlarged. Copiously illustrated in Black and White, with Colored Plates. Philadelphia: Lea Brothers & Co., 1901.

Jewett's work from its first appearance, two years ago it has stood as the leading American work on obstetrics. Eighteen authors, under the supervision of the veteran teacher, Jewett, have in 800 pages covered the subject in an exhaustive manner. The work is unique in illustrations and largely so by reason of the adoption of the newer methods of photo-lithographs, etc., etc. As a work of art as applied to obstetrics this is superb and is a leader among books on this subject. Nowhere, are illustrations more appreciated than in obstetrics. Some changes are noted in the editorial staff by reason of the death of Drs. Etheridge and Browning. The contents of the work in brief is as follows: Part I.—Anatomy (Bristow). Part II.—Physiology of Pregnancy (Manton, Palmer, Dickinson). Part III.—Pathology of Labor (Jewett, Buckmaster). Part IV.—Physiology of Puerperium (Robb, Bartley). Part V.—Pathology of Pregnancy (Manton, Crockett, Van Cott, Vineberg, Henrotin). Part VI. –Pathology of Labor (Cameron, Webster, Jewett, Edgar). Part VII. – Pathology of Peurperium (Van Cott, Hamilton, Williams, Chapin). Part VIII. – Obstetric Surgery (Robb, Jewett, Polok). This is a masterly work, published in a masterly, manner and ranks as the leading American work on obstetrics.

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A Laboratory Course in Bacteriology. For the use of Medical, Agricutural and Industrial Students. By Frederic P. Gorham, A. M., Professor of Biology, Brown University. 12mo. volume of 198 pages with 97 illustrations. Philadelphia and London: W. B. Saunders & Co., 1901. (Cloth, $1.25 net.)

Bacteriology is essentially a laboratory study. It is only by actual laboratory work that it can be taught in a manner as to serve any useful purpose. It is also a subject of very general scientific interest. Courses in bacteriology are no longer confined to the medical schools, but are being introduced into colleges and agricultural and industrial schools. This volume has been prepared as a guide to the practical details of laboratory work. It is intended to present the subject in such a general way as to lay a broad foundation for later specialization in any branch of bacteriology. By a judicious selection the course can be made to conform to the requirements of medical, agricultural or industrial students.

The Principles of Hygiene: A Practical Manual for Students, Physicians and Health Officers. By D. H. Bergey, A.M., M.D., First Assistant, Laboratory of Hygiene, University of Pennsylvania. Octavo volume of 495 pages, illustrated. Philadelphia and London: W. B. Saunders & Co., 1901. (Cloth, $3.00 net.)

This book is intended to meet the needs of students of medicine in the acquirement of a knowledge of those priciples upon which modern hygienic practices are based, and to aid physicians and health officers in familiarizing themselves with the advances made in hygiene and sanitation in recent years. The book is based on the most recent discoveries, and represents the practical advances made in the science of hygiene up to date. Among the important subjects considered are Ventilation, Heating, Water and Water Supplies, Disposal of Sewage and Garbage, Food and Diet, Exercise, Clothing, Personal Hygiene, Industrial Hygiene, School Hygiene, Military and Naval Hygiene, Habitations, Vital Statistics, Disinfection, Quarantine, etc. The idea of the book is to give the reader a clear understanding of the general principles of this broad subject. The rapid strides made in our knowledge of the entire subject has rendered such a book, reflecting the more recent discoveries, a necessity to physicians and students of medicine.

CITY CULLINGS.

St. Mary's Hospital.—The annual report of St. Mary's Infirmary, shows that during the year 1901, 1,521 patients were treated at the hospital. Of these 634 were charity patients and 103 paid in part; 1,051 were Catholics, 316 Protestants, 21 Hebrews, and 130 belonged to no religious denomination; 837 were natives of the United States, the others being natives of Ireland, England, Scotland, France, Italy, Russia, Holland, Belgium, Bohemia, Denmark, Sweden, Poland, Norway, Asia, Syria, Canada, and Mexico.

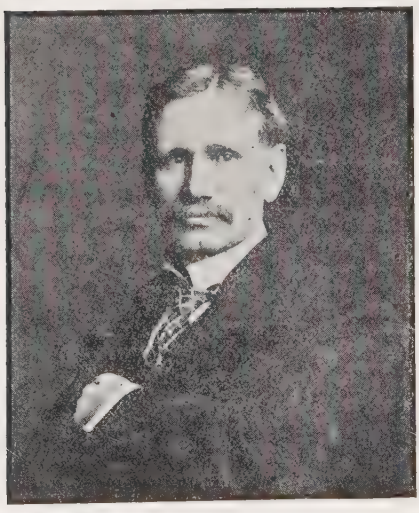
Another Idol Shattered.—The self-immolation of a member of our profession on the alter of science was the occasion of the expenditure of considerable printer's ink and not a little gush some months since. In the interest of science and for a small monthly stipend the doctor was forsaking family and comforts to nurse and study the Chinese leper Dong Gong. The doctor has resigned his charge. It is not stated whether he has learned all that is to be learned from this case, or whether he was a victim of monotony—at any rate he is no longer a hero in the eyes of the public.

Banquet in Honor of Dr. Gregory.—The medical profession of St. Louis, under the auspices of the St. Louis Medical Society, will give a testimonial banquet to Dr. Elisha H. Gregory, who for fifty years has been an active teacher of medicine, probably longer than any other man living. The banquet will be given at the Planters' hotel, on April 17. A large number of guests will be invited, including all the ex-presidents of the American Medical Association, out of compliment to Dr. Gregory, who was president of the Association in 1886-87. A committee, composed of Drs. F. J. Lutz, N. B. Carson, J. P. Bryson, C. H. Hughes, W. B. Outten, and H. W. Loeb, has the arrangements in charge.

Dr. Norvell Goes to the Philippines.—Dr. B. P. Norvell, a senior physician at the City Hospital, has resigned his position and will leave within a month for the Philippines, where he will become surgeon in the regular army. Dr. Norvell's home is in Steeleville. He is a graduate of the Beaumont-Sims College of Medicine.

Our City Water Supply.—Reports are in from the three experts who were recently appointed by Mayor Wells to investigate our water supply. Two of the three were enthusiastically in favor of the Meramec River supply system, the third advocated purification by filtration of water from the present source. The public seems favorably inclined toward Meramec water; the talk of a $20,000,000 expense necessary to establish the system may change this sentiment.

The Medical Director of the Louisiana Purchase Exposition.—The important post of Medical Director of the St. Louis World's Fair, has been filled by the appointment of Dr. Leonidas H. Laidley, who was born at Carmichaels, Pa. He was educated with a view to entering the medical profession, and entered Cleveland Medical College in 1866; the following year he entered Jefferson Medical College at Philadelphia. After graduating in 1868, he practiced medicine with his father and brother, and then went to New York, Bellevue Hospital Medical College, and took a higher course, being graduated with honors in 1872. Coming to St. Louis the same year, he entered upon a successful career both as a practitioner and a medical teacher, showing always a decided love for the humanitarian side of his profession. He helped organize the Young Men's Christian Association, and attended the sick applying to that institution for aid. He organized the free dispensary, which became the nucleus of the Protestant Hospital of this city.



A short time after the organization of the St. Louis College of Physicians and Surgeons, was called to the chair of surgical diseases of women. After filling that post for years he was tendered the same chair in the Beaumont Hospital Medical College, and upon its consolidation with the Marion-Sims College, forming the Marion-Sims-Beaumont College of Medicine he was made Professor of Gynecology and Pelvic Surgery. In addition he is surgeon to the Protestant Hospital, consulting surgeon to the Female Hospital, and a leading member of the St. Louis Medical Society and other medical organizations. He was a delegate to the British Congress in 1883, and while abroad visited the hospitals of the principal cities. When the Louisiana Purchase Exposition was organized, Dr. Laidley was one of the incorporators. St. Louis and the Exposition management are to be congratulated upon the judicious selection of its Chief Medical Director.

Reports on Progress.

COMPRISING THE REGULAR CONTRIBUTORS OF THE FORTNIGHTLY DEPARTMENT STAFF

GYNECOLOGY.

In Charge of Josephine Milligan, M. D.

JACKSONVILLE, ILL.

A New Method of Performing Hysterectomy (Robinson, American Journal of Surgery and Gyneology, July, 1901).—The technic of the operation consists of drawing the uterus distalward with a traction forceps and with knife or scissors incise the posterior and anterior fornices. With index finger separate bladder and rectum from the uterine surfaces. Clip with the scissors from cervix to just above the internal os on both sides, so as to cut out one-fourth of the substance of the organ; immediately suture the surfaces together with silkworm gut. Then seize the uterine fundus and draw it into the vagina and sever the lateral uterine segments from fundus and cervix. Apply silkworm gut sutures to the cut surfaces so no cut uterine surface is exposed and the sutures in the cervix are met. The peritoneum covers all the remaining segments of the uterus. One-fourth from the centre of the organ is cut out. About one year's trial of this operation has given very satisfactory results. The uterine segments atrophy, perhaps in 25 per cent, menstruation ceases, no neurotic menopause arises (so far). The pyo-salpinx (evacuated) recovers, and the patients present excellent conditions. The conservative features are that the utero-ovarian vascular circle is not severed, the ovaries, oviducts and ligamentum latum are left entirely intact, no unnecessary tissue is lost, yet the function of the organ is arrested, that is menstruation, abortion and labor.

Instrumental Perforation of the Uterus (Krusen, American Medicine, December 4, 1901).—Case. Patient, mother of two children, aged 8 and 5, had had a hemorrhage for three to four weeks, varying in amount but constant, no pelvic pain or constitutional disturbance, except from loss of blood. Hemorrhage was less when patient was confined to bed. Examination showed an enlarged uterus, much like that of subinvolution, cervix deeply lacerated, and so soft that it would almost admit the finger. Dilatation was unnecessary before curetting because of the soft and relaxed condition of the cervix, and a considerable number of clots, or portions of membrane, supposed to be remnants of incomplete abortion were removed. The sharp curette was continued unusually long, in order to get the cavity clean. There was more loss of blood at the latter part of the curettement than at first, and still a sensation as of a portion of membrane in the upper left portion of the fundus; after a brief effort this was brought down to the external os, and proved to be a portion of the omentum. It was replaced through the now contracting internal os and a strip of gauze carried in after it to the fundus of the uterus. At this point, the services of

a surgeon being needed, Dr. Krusen was sent for. He performed celiotomy within two hours. An opening in the fundus large enough to admit the index finger was found. The omentum had been pulled through this opening into the uterine cavity and the gauze packing, that had been introduced from below, protruded through the fundal aperture, and had been effective in checking hemorrhage. A part of the injured omentum was removed; the opening in the uterus closed and the abdominal cavity irrigated by normal salt solution and the walls sutured. An uninterrupted recovery followed.

Dysmenorrhea (Dunning, Indiana Medical Journal, August, 1901).—From a study of 1,000 office cases as to the condition of menstruation the following statistics are given. Three hundred and fifty-five women had pronounced pelvic pains during the period, 105 had slight pain, and 33 reported intermittent pain of pronounced type; 310 had no pain. There were 73 cases of retroversion of the uterus, of these 84 had dysmenorrhea. There were 47 cases of fibroid tumor of the uterus, of these 20 had dysmenorrhea. There were 2 cases of prolapsus, of these 20 had dysmenorrhea. There were 8 cases of pyosalpinx, 4 had painful periods. There were 126 cases of distinct uncomplicated endometritis, 80 had pain during menstruation. There were 96 cases of endometritis with displacement of the uterus, 67 of these had dysmenorrhea. Flexions were attended by the largest number of suffering; 53 cases of anteflexion showed 44 of severe pain, 5 of slight pain and only 4 of no pain. Of retroflexion there were 10 cases, in 8 of which there was severe pain. An occasional attack of dysmenorrhea will often follow over-exertion mental or emotional excitement, loss of sleep and constipation.

A Report of 212 Cases of Ventrosuspension of the Uterus (Woods, American Medicine, August 17, 1901).—This report of cases has been from the books of Drs. Penrose and Beyea, and cover a space of eight years. The method of operation is, after the usual preparation, to make a median incision one to two inches in length to end one-half inch above the symphosis. The ovaries and tubes are examined and operated on, if necessary. The fundus uteri is brought well forward, its posterior surface presenting at the incision. A curved Kelly needle, carrying a No. 3 Tait silk suture is passed through a few fibres of the rectus muscle and the peritoneum on one side immediately above the lower angle of the incision, then through the tissues of the fundus uteri a little posterior to a line joining the uterine cornua. The amount of uterine tissue embraced in this suture is one-fourth inch in breadth and depth. The needle is then passed through the peritoneum and rectus muscle of the other side. A similar suture is passed one-third of an inch above this one. The wound is closed in layers after tying the sutures in the usual manner. No scarification is done. The following conclusions are drawn: 1. That the course of subsequent pregnancies and labors do not seem to be impeded by this operation. 2. That the operation, in selected cases gives excellent results, and the relief experienced is lasting. That it restores the normal condition of the uterus, and does not substitute a fixed anteflexion. 4. That the risk is minimum and the danger from hernia slight. 5. That by including a small amount of muscular tissue the ligament is strengthened without risk to the patient.

MEDICAL MISCELLANY

Asbestos Dishes for Consumptives.—F. Kornfeld, of Vienna, exhibited at the local medical society, December 6, a number of articles made for the use of consumptives out of asbestos: cuspidors, dishes, etc. They can be sterilized without injury by putting them in the fire, and can be made at a trifling expense.

Tobacco Hearts in High School Pupils.—Cigarette smoking is held responsible by the medical examiners of the Chicago School Board for a startling increase in heart disease and nervous ailments among the pupils of the high schools. The condition was revealed by examinations recently held for admission to athletic sports. Twenty-one out of one hundred were found unfit, and all but three suffered from some form of heart trouble.

C. & A. Co. Surgeon's Organization and Banquet.—The company surgeons for the Chicago & Alton R. R. held an all-day session in Jerseyville Monday, February 3d. A permanent organization termed the Chicago and Alton Surgical Association was perfected. The object of this Association is to insure immediate temporary relief to injured employes and others through means devised by the surgeons. Something new in the line of emergency relief boxes has been devised, and will be put in all coaches and cabooses for this purpose. The executive session was conducted at the court house during the forenoon. At 1 o'clock this session closed and the surgeons proceeded to the Commercial Hotel, where they were joined by the local surgeons, newspaper representatives and other invited guests, and all banqueted together. After the banquet short speeches were made. Following this another meeting was held at the court house, where the following officers were elected: President, W. R. Rhodes, Mexico, Mo.; Vice-President, Eastern Division, Dr. M. C. Fairbrother, East St. Louis, Ill.; Vice-President, Western Division, Dr. F. A. Howard, Slater, Mo.; Secretary, Dr. T. H. Page, St. Louis, Mo. *Company Surgeons.*—Dr. Howard Crutcher, consulting surgeon, Chicago, Ill.; Dr. C. J. Price Chicago, Ill.; Dr. R. Haley, Brighton Park, Ill.; Dr. Jas. A. Clyne, Joliet, Ill.; Dr. J. S. Miller, Peoria, Ill.; Dr. W. E. Guthrie, Bloomington, Ill.; Dr. Waldo Fisher, Alton, Ill.; Dr. H. C. Fairbrother, East St. Louis, Ill.; Dr. Carl E. Black Jacksonville, Ill.; Dr. E. H. Highbee, Roodhouse, Ill.; Dr. E. M. Ross, Carrollton, Ill.; Dr. M. B. Titterington, Jerseyville, Ill.; Dr. J. W. Scott, Venice, Ill.; Dr. T. H. Page, St. Louis, Mo.; Dr. B. Bradburn, Pearl, Ill.; Dr. J. J. Pearson, Pontiac, Ill.; Dr. J. L. Thorpe, Jefferson City, Mo.; Dr. S. B. Ayers, Louisana, Mo.; Dr. F. S. Love, Bowling Green, Mo.; Dr. W. R. Rhodes, Mexico, Mo.; Dr. A. J. Brown, Higbee, Mo.; Dr. F. A. Howard, Slater, Mo.; Dr. M. W. Pickard, Kansas City, Mo.; Dr. O. C. Smith, Blooming ton., Ill.; Dr. G. D McCall, Fulton, Mo.; Dr. Walter Ryan, Springfield, Ill.; Dr. J, B. Hardin, Marshall, Mo.; D. J. Pritchett, Glasgow, Mo. Dr. H. C. Webb, Higginsville, Mo.: Dr. H. C. Wilson, Lincoln, Ill. Dr. John Denby, Carlinville, Ill.: Dr. Arthur Prince, Springfield, Ill.: Dr. J. D. Whitney, Petersburg, Ill.; Dr. Roy Sexton, Streator, Ill.; Dr. J. A. Wheeler, Auburn, Ill.; Dr. J. A. Thomas, Pleasant Hill, Ill.

Garrod Spa in a New Home.—The Enno Sander Mineral Water Co. now hails from new and commodious quarters at 2801-2811 Lawton Avenue. The change gives them one of the nicest plants in the country, and speaks well for the present prosperity of the company. Garrod Spa has always been a winner.

The Prevalence of Blindness.—There are about 1,000,000 blind people in the world, says a statistician. The largest proportion is found in Russia, for there nearly 200,000 people walk in literal darkness. The chief cause is opthalmia, due to bad ventillation of the huts of the peasantry, and the inadequate facilities for treatment. The sands of Egypt are reponsible for a good deal of blindness in the Khedive's land. Amongt the world's inhabitants, the known proportion is something like one blind person in every 1500.—*Health*.

A Diagnostic Chart of Respiratory Diseases.— We have lately received one of the most reliable differential diagnosis charts, covering diseases of the lungs, pleura, bronchi, trachea and larynx, which it has ever been our privilege to see. The data presented is from the pen of Dr. Edward C. Hill, and evidences a great amount of painstaking work on his part. Something better than forty-five diseases affecting the respiratory organs are considered, and after each is given the etiology and diagnostic evidence gained from inspection, palpation, percussion, auscultation, cough, pain, dyspnea, expectoration, voice and miscellaneous. These are arranged in parallel columns, and the diseases most often confused are grouped for aid to differentiation. The usefulness of such a chart will be appreciated by every physician, and we trust that a large number of our readers will avail themselves of the generous offer of the McArthur Hypophosphite Co., Ansonia, Conn., who will mail copies to physicians making application.

Substitution Again.—So much has been written and said against substitution that it seems almost beyond understanding that there can be any in the profession who are not alert against the evil. But we are not properly alert, else the substitutor would find the practice one of the most unprofitable. Imitation is one of the penalties of success, if the imitator does not equal the original article he has at least the grace to have left its fame untarnished, for he has respected its name and has sailed under one of his own choosing. This cannot be said for the substitutor, he is an unmitigated thief who is utterly indifferent to all honorable principles and works solely for his personal gain. This was demonstrated in the exposure made by Fairchild Brothers & Foster some two years since, and more recently by the Farbenfabriken of Elberfeld Co., who discovered a wholesale counterfeiting scheme of a most despicable character, which not only victimized the physician and his patient, but the retail druggist, as well, the product, package and labels all being counterfeit. Phenacetin, aristol trional, sulphonal, etc., are essential to the successful practice of medicine, but it is imperative that we have the original, it would seem that the druggists have a substitution problem to face quite as difficult to manage as that which we are confronted ourselves.

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MEDICAL MEMORANDA.

THE TREATMENT OF NASAL CATARRH BY THE GENERAL PRACTITIONER.

By Eugene C. Underwood, M. D., Sugeon B. & O. S. R. R.; Surgeon K. & I. B. Co., etc., Louisville, Ky.

I have long entertained the view that the general medical practitioner neglects to treat his patients for catarrh and sends them to a specialist when he could successfully manage these himself. In fact, the treatment of catarrh is very simple and the results which follow correct and systematic treatment are very satisfactory. In practice two forms of chronic nasal catarrh are met. These are hypertrophic rhinitis and atrophic rhinitis.

The hypertrophic form is more generally seen, and is characterized by a thick mucous discharge from the nose. great liability to colds, obstruction of one or both nostrils, which forces the patient to breathe through his mouth, nasal intonation of the voice. There is more or less headache and the sense of smell is lost or impaired. There is dryness of the throat, deafness and other symptoms showing the extension of the disease to neighboring organs. Exostosis of the osseous structures often is seen.

Atrophic rhinitis (ozena) is characterized by a sense of dryness in the nose and throat, a thick, purulent discharge and the expulsion of discolored crusts and an offensive putrid odor. The sense of smell is impaired and the patient is weak and anemic.

The mucous membrane is dry and glazed, but in advanced cases ulceration and necrosis are present.

The treatment consists of applications directly to the diseased area and the administration of such internal remedies as will correct any coexisting disease or morbid state. In some cases where there is occlusion by exostosis the resources of surgery must be invoked.

Let me examine more in detail the treatment of the types of nasal catarrh.

In simple chronic hypertrophic rhinitis the results of treatment will be most flattering. In a case attended with no constitutional disease nothing is necessary beyond having the patient spray the nasal mucous surface with a solution composed of equal parts of water and Hydrozone every three hours.

If the case has persisted some time and the patient has an amount of mucous discharge, I have him take twenty drops of balsam of copaiba four times daily. The Hydrozone is not only a disinfectant and germicide, but its curative action on the inflamed mucous membranes is speedy and is not equaled by any other drug I have ever used. When the patient is anemic I have him take iron, and any other drug is used when it is called for by any associated disease or morbid condition, but the Hydrozone spray is used in all cases.

In the atrophic variety we shall have to use the same local application. The Hydrozone at once overcomes the offensive odor and takes off the purulent crusts.

These cases must be treated with cod liver oil, iron and such other remedies as will bring up the general health.

DYSMENORRHEA.

In the congestive type of dysmenorrhea, in which the painful menstruation is usually due to some inflammatory condition of the pelvic organs, especially the uterus, much benefit is derived from intra-vaginal applications that will relieve the engorgements of the parts. Tampons soaked in glycerine and boric acid, or iodine. or ichthyol have been largely used for this purpose, but this has only been in the absence of something better, since the inconvenient and disagreeable nature of the tampon treatment has always been recognized. The modern way of accomplishing the same purpose in a far more efficient, cleanly and convenient manner is by the use of Micjah's Medicated Uterine Wafers. They are easily introduced into the vagina, are unirritating and do not require removal. Their ingredients are gradually liberated, exerting an astringent, antiseptic and anticatarrhal action upon the congested and inflamed parts. The congestion is relieved, the circulation regulated, the absorption of exudates promoted and the dysmenorrhea thus permanently removed.

NEURASTHENIA. Pepto-Mangan (Gude) acted extremely well in all cases in which it was employed. In the case of my patient, who was suffering for a long time with neurasthenia in consequence of anaemia, a prompt and visible improvement always ensued. I will continue to recommend and employ Pepto-Mangan in the future in appropriate cases.

DR. FRITZ THELEMANN,
Surgeon General.

Coburg, August 7, 1901.

THE TREATMENT OF COUGH.

Dr. Henry Herman has demonstrated the great value of heroin in a series of nineteen cases. He says: Heroin has now been tested in so large a uumber of cases, reported by so great a number of trustworthy observers, that its status may be accepted as surely established. The sum of clinical and pharmacological experience designates heroin as a respiratory sedative superior in every respect to the older narcotics, and, withal, devoid of toxic or depressant properties. Its physiological action consists in a diminution of the frequency of respiratory movements, and at the same time in an increase of the volume of the individual respiratory act. The reduction of the tussal reflexes is combined with the relief of pain without the danger of a drug habit, which exists when older opiates are prescribed. As regards after effects, we may, I think, accept the conclusion of Manges (New York Mdical Journal, January 13 and 20, 1900), based upon a review of the work of numerous writers on the subject, that heroin is not followed by serious effects of an untoward character unless it be administered in excessive doses. My own observations, in a large number of cases, confirm this view. The only collateral effect that I noted in the use of heroin was a tendency to constipation, which is especially prominent in old persons, but is in all cases combated with mild laxatives. I have not observed vertigo, nor vomiting, after the administration of doses proportionate to age. There is no doubt, however, that after all heroin is a derivative of morphine, and therefore is to be used with caution and judgment, which drugs of this class demand. Fortunately its very efficiency precludes the necessity of administering doses of any magnitude beyond the usual. Next to the respiratory sedatives the expectorants are the most essential factors in the treatment of cough. The members of the ammonium group for a long time have enjoyed well merited preference as stimulating expectorants on the part of physicians. I wish, however, to call attention to one member of the ammonium family that has been most inexcusably neglected—ammonium hypophosphite. Its action is similar to that of ammonium chloride, but it has the advantage of being easily borne by the stomach and of being agreeable in taste.

There can be no question as to the increased value of a combination of remedies which embodies so efficient a respiratory sedative as heroin and so trustworthy an expectorant as ammonium hypophosphite, and therefore I determined to try the preparation known as glyco-heroin in the treatment of coughs, with special reference to paroxysmal coughs and chronic, obstinate bronchial catarrhs. This preparation, in addition to 1-16 of a grain of heroin hydrochloride to the drachm, and ammonius hypophosphite, contains balsam of tolu and white pine bark.

Of the nineteen cases under observation, there were ten cases of whooping cough in patients ranging from two and a half to thirty-eight years of age. In these the dose varied, according to age, from ten drops to a teaspoonful, the intervals not exceeding four hours. The results were very satisfactory in all cases, with the single exception of case 4, a mild type of whooping cough in a patient aged 38 years, in whom nothing but a change of climate had the desired effect. In the other nine cases of pertussis, there was very prompt diminution of the number and severity of the paroxysms, and an improvement in the general well being of the patient. These effects were all the more noteworthy as they are rarely seen in pertussis on the administration of any other sedative remedy.

In the three cases of subacute bronchitis, the results were so prompt as to astonish the patients themselves. With due care, the continuation of the catarrhal process into a chronic state was avoided.

In the two cases of cough, occurring during pregnancy, glyco-heroin proved very efficient. Of all forms of coughs, sedatives are most urgently indicated in the irritable condition of the whole system which obtains in the pregnant state. In glyco-heroin I found a palatable combination which at the same time is free from the depressant properties of the other opiates.

There were four cases of chronic bronchitis, the age of the patients ranging between 27 and 81 years. As has been noted by other writers, heroin is not so well borne by the aged as it is by the young. The dose must therefore be kept down in old people, and it is for this reason that in one of the cases, No. 17, in which the patient was 81 years old, no results could be obtained. In contrast to this case stand the other two instances of chronic bronchitis in the aged (persons aged 73 and 78 years

respectively) in which the effect was all that could have been desired.

In conclusion, I will say that, while there probably never will be a remedy which will act with equal efficiency in all cases, the results which I obtained with glyco-heroin in a number of difficult and obstinate cases of cough enable me to express myself as fully satisfied that it is an efficient respiratory sedative and expectorant.

A LESSON FROM THE MASTERS.

The study of the practice and teachings of the really great men in medicine is a fruitful source of knowledge and practical guidance in the management of disease. Two principles are clearly recognizable; first, that Nature possesses the ability to successfully combat the acute infectious diseases without the necessity of resort to powerful drugs for the relief of symptoms; second, that treatment is most successful which is most simple and which has for its object the reinforcement of Nature's methods of antagonizing the encroachment of the disease processes. The application of these principles constitutes the most successful methods of treating influenza, pneumonia, bronchitis and the numerous winter diseases associated with inflammation of the respiratory organs.

One method of treating these conditions is by administering a powerful and, in truth, a depressing drug for practically every symptom, e. g., opium in some form, to control cough, a cardiac and metabolic depressant to reduce fever, stomach-disturbing remedies as expectorants, etc. This plan of treatment is, authorities assert, antiquated, irrational and ineffective. On the contrary it is a matter of absolute fact, proven by experience, that if a patient with pneumonia, influenza, severe bronchitis, is properly nursed, given adequate easily assimilated nourishment and be given Gray's Glyc. Tonic Comp. in dessert to tablespoonful doses every three or four hours, that patient will withstand the attack much better and be surprisingly free from the pronounced depression which accompanies and succeeds these diseases. This plan of treatment has also the great advantage that the patient is spared the baneful effects of excessive drugging.

Gray's Tonic not only fortifies the patient's strength, aids digestion and assimilation, but has an unquestionable influence in palliating the symptoms of respiratory inflammation.

DIABETES MELLITUS.

"There is no question as to the pronounced value of Allouez Magnesia Water in diabetes and attendant renal complications. I treat the disease from the standpoint that every gland and emunctory in the diabetic patient is in a semi-polluted state and secreting virum. Therefore, free and healthy metobolism is re-established after the protracted daily internal saturation of the patient with this naturally alkaline antiseptic agent. The elimination of the sugar and waste products and the cleansing of the stagnated emunctories without any reactionary depression. The solvent, diuretic and anti-catarrhal properties of Allouez certainly exert a powerful influence in diabetes."—Vail (Medical Herald.)

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